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Salt Lake City, Utah

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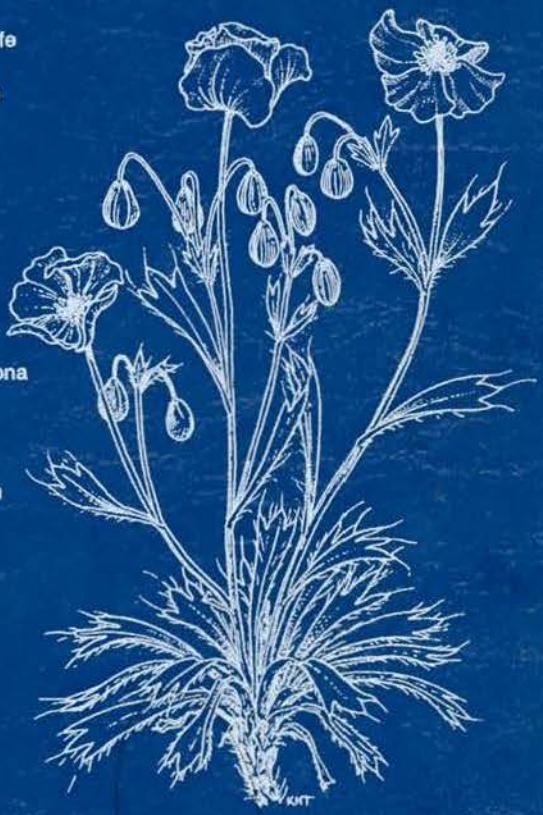
NAVAJO NATION
Navajo Natural
Heritage Program
Window Rock, Arizona

SKULL VALLEY
GOSHUTE TRIBE
Salt Lake City, Utah

UTAH

Endangered, Threatened and Sensitive Plant Field Guide



Arctomecon humilis (Dwarf Bearclaw Poppy), Washington County, Utah
Illustration by Kaye H. Thorne

1991

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UTAH

Threatened, Endangered, and Sensitive

Plant Field Giude

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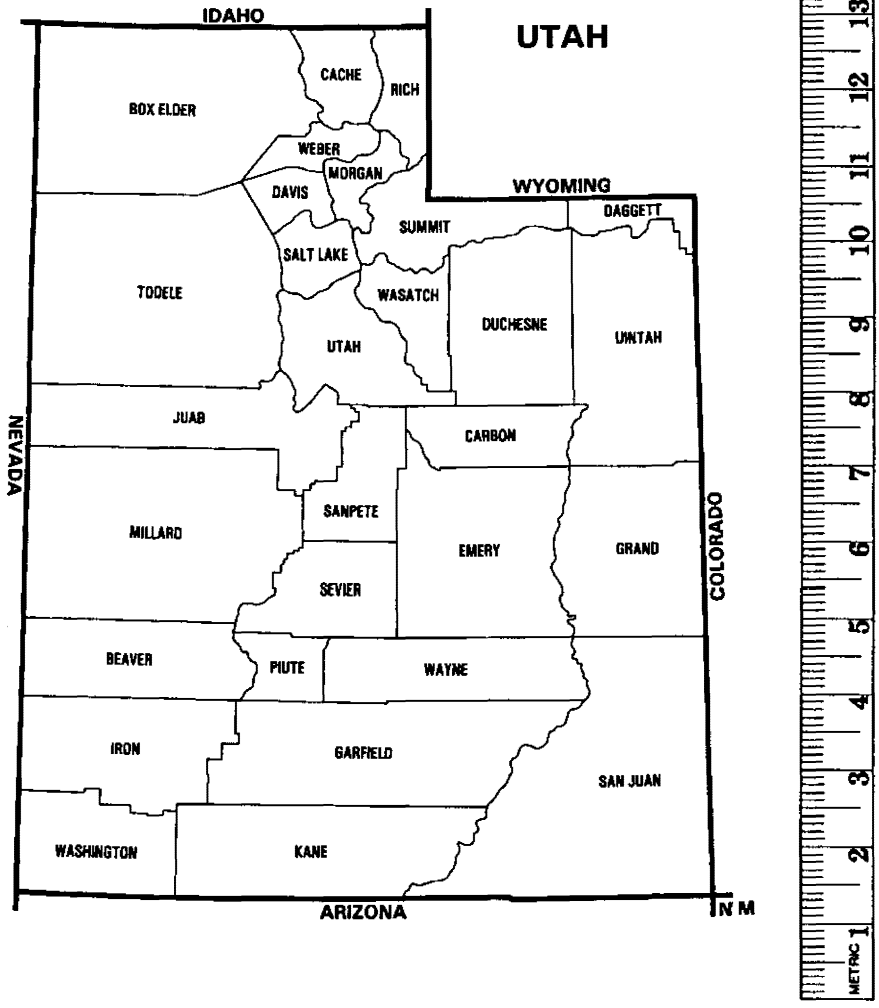
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INTRODUCTION

Federal, State, and Indian Lands comprize a major part of the land area in Utah. Much of the State is still poorly known botanically and additional surveys are needed for the majority of sensitive species and even some of the Federally listed taxa recorded for the State. The BLM has management responsibility for about 75 percent of the Threatened, Endangered, and Sensitive (TES) plant species, Forest Service has 48 perecnt, National Park Service 36 percent, Utah Indian Lands 9 percent, State 15 percent and private 26 percent based on current information available. Many species occur on lands administered by 2 or more agencies. The percent of TES plant habitat administered by the various agencies is not known at this time.

This guide is being prepared through efforts of the Utah TES Plant Interagency Committee. The guide is arranged in a 3-ring binder style to facilitate additions and deletions as new information warrants changes. Additional funding is anticipated to revise and update this guide as necessary. Editorial comments are welcome.

A combined list of all agencies TES plants (alphabetical by scientific name) is included, detailing Federal listing and Global Heritage/State status. Following this list are separate agency species lists (U.S. Forest Service, Bureau of Land Management, National Park Service and Utah Indian Tribes), each in alphabetical order by scientific name, each followed by a resource area list. Also included are TES plant listings by habitat and soil type. Summary data on each species' status, habitat, global and state distribution and management responsibility are also included. Endangered, threatened and proposed species with summary data are located first in the guide, followed by an alphabetical listing for the candidate and sensitive species with summary data. Look-alike data are listed, where applicable, for species with closely related taxa. Illustrations, with diagnostic field characters, are included for each species. Photographs of the species and their habitat are included for some; photographs are needed for the remaining species.

More detailed information on keys to the species and technical descriptions are available in "A Utah Flora" by Welsh, Atwood, Higgins, and Goodrich, 1987; and The Intermountain Flora Vol. 1, 3B, 4 and 6 (Cronquist, A.H., A. Holmgren, N. Holmgren, J. Reveal and P. Holmgren 1972, 1977, 1984, and 1989).

The Utah Natural Heritage Program (UTHP) is serving as a central repository for TES plant data in Utah. Agency personnel involved in the plant program should work closely with Joel Tuhy (Program Coordinator) and the Heritage Botanist, Ben Franklin. New data should be incorporated into the UTHP, Forest and Regional Offices, BLM District and State Offices, National Park Service and National Monument Offices, and each Indian Tribal Offices data base to increase our ability to manage viable populations of these species.

Project clearances should be conducted for all TES plants by the respective agencies where project activities are likely to impact TES species habitats. When TES species are located in a proposed project area, identification should be verified by a professional botanist. This guide should be of value in assisting with plant identification and the biological evaluation process for TES plants.

BUREAU OF LAND MANAGEMENT POLICY AND REGULATIONS

Threatened, endangered, and other sensitive plant species located on BLM administered lands in Utah are referred to as "special status species". BLM policy regarding special status species is set forth in BLM Manual 6840.

BLM administers about 42 percent of the total land area of the State of Utah (approximately 22 million acres). These lands include a wide variety of vegetation types ranging from hot desert to alpine. As a result of this diversity, potential habitats for special status species abound. Much of the potential habitat for TES plants have not been properly inventoried and are poorly known from a botanical perspective.

BLM in Utah is beginning a concentrated effort to inventory and study the ecology of special status plant species. The goal of this effort will be improved, appropriate on-the-ground management practices which will provide for the preservation and recovery of all special status species. It is hoped that this field guide will aid in this effort.

For additional information on the BLM TES plant program contact Ron Bolander in the State Office (801) 539-4065.

U.S. FOREST SERVICE POLICY AND REGULATIONS

In May 1988, the Forest Service Regional Office (RO) conducted a Threatened, Endangered, and Sensitive (TES) Species Activity Review to determine the TES program status. The review findings, recommendations, and selected alternative were approved by the Regional Forester (RF) on November 23, 1988.

The alternative selected advocates an incremental approach to increasing the Regional TES species program. It will increase the proactive activity regarding selected priority species and programs without seriously affecting other ongoing programs.

In early March 1989 the RF approved the TES Species Action Plan that identifies the specific tasks needed to implement the selected alternative from the Regional Activity Review.

This field guide was prepared as part of two actions identified in the Action Plan. 1) Increase training and education efforts; and 2) Increase awareness both internally and externally.

Other recently completed documents in the Forest Service TES plant program are 1) The TES Plant Program Action Plan, January 6, 1989; and 2) the R-4 Sensitive Plant Handbook, September 1988. These documents provide management and action strategies and policy to implement the Forest Service 2670 TES Manual direction. Copies are on file in the Forest and District offices. Additional copies can be obtained from Duane Atwood in the Regional Office.

Chapter 4 of the Region 4 Sensitive Plant Program Handbook, 2609.25, identifies the collection requirements for general and sensitive plant collecting. For general collecting, a permit may be obtained from the Forest Supervisor(s) for specific areas of interest. Collection of sensitive plants or parts is authorized by the Regional Forester.

For additional information on the Forest Service TES plant program, consult the documents listed above or contact the Forest Service Regional Botanist at FTS 586-5599, (801) 625-5599, or DG to D.Atwood:R04A or the Forest TES plant coordinator in the Supervisors Office.

NATIONAL PARK SERVICE POLICY AND REGULATIONS

There are eleven National Park Service units located within the State of Utah. These vary from small historical sites such as Golden Spike Historic Site to the 1.2 million acre Glen Canyon National Recreation Area. Candidate, threatened or endangered plants have been identified in each of the units.

The National Park Service is dedicated to the preservation of the biological diversity of the natural flora. The resource management plan for each park unit contains project statements for inventorying and monitoring the candidate and listed threatened and endangered species.

The collecting of biological specimens in any unit of the National Park System is regulated under Title 36 of the Code of Federal Regulations. Where collecting is proposed as part of a research proposal, a collecting permit must be issued by the Park Superintendent. All specimens taken remain the property of the United States and National Park Service specimen labels must be affixed to all voucher specimens.

For additional information on the National Park Service threatened and endangered plant program in the State of Utah contact Jim Holland at Glen Canyon National Recreation Area (602) 645-2471.

UTAH INDIAN TRIBES POLICY AND REGULATIONS

In Utah there are seven federally recognized Indian governments, the Navajo Nation, Ute Indian Tribe, Paiute Indian Tribe of Utah, Goshute Tribe, Skull Valley Tribe, Northern Shoshoni Tribe and White Mesa of Ute Mountain Tribe.

The NAVAJO NATION is a member of the Athapaskan Branch of the Na-Dene language family. Navajo is a Spanish word; **Dine** ("The People") is the Navajo name for themselves. The Navajo Nation encompasses approximately 16 million acres in Arizona, New Mexico, and Utah. This Tribe has approximately 1.1 million acres in southeastern Utah. In 1984 the Navajo Nation and The Nature Conservancy established a Natural Heritage Program to inventory rare and endangered species and serves as a repository for TES data. The Navajo Nation has a regulation, **Navajo Tribal Code Title 17 Section 507(a)**, that protects federally listed threatened and endangered animals and their habitat. In February 1991, the Navajo Nation Natural Resources Committee passed a list of plants and animals protected under **Navajo Tribal Code Title 17 Section 507(a)**. The Navajo Nation requires a permit to collect, research, and survey plants and animals. For an application, please write to: Larry Benallie, Director, Navajo Fish and Wildlife, P.O. Bos 308, Window Rock, AZ 86515.

The UTE INDIAN TRIBE is of the Shoshonean ancestry and their language is Uto-Aztecan. The words, Ute and Utah are derived from the Spanish incorrect pronunciation of the tribal name **Yutichah**. Nuche ("the people") is the Ute name for themselves. The Ute Indian Tribe is composed of Uintah, White River, and Uncompahgre Bands. This Tribe encompasses approximately 4.2 million acres of tibal and ceded lands in eastern Utah. The Ute Indian Tribe requires a permit to collect, research, and survey plants and animals. For an application, please write to: Ute Indian Tribe, Luke Duncan, Chairman, P.O. Box 129, Fort Duchesne, UT 84026.

The PAIUTE INDIAN TRIBE OF UTAH is of Shoshonean ancestry and their language is Uto-Aztecan. The Paiute Indian Tribe of Utah is composed of Shivwits, Kanosh, Koosharem, Indian Peaks, and Cedar City Bands. This Tribe has 32.3 thousand acres of noncontiguous land in central and southern Utah. The Paiute Indian Tribe requires a permit to collect, research, and survey plants and animals. For an application, please write: Paiute Indian Tribe of Utah, Geneal Anderson, Chairperson, 600 N. 100 E., Cedar City, UT 84720.

The GOSHUTE INDIAN TRIBE is of the Uto-Aztecan language. The Goshute Indian Tribe encompasses approximately 110 thousand acres. The Goshute Indian Tribe requires a permit to collect, research, and survey plants and animals. For an application, please write to: Goshute Tribe, Harlan Pete, Chairman, P.O. Box 6104, Ibapah, UT 84034; (801) 234-1138.

The NORTHWESTERN BAND OF SHOSHONI is of the Uto-Aztecan language. This Tribe has approximately 184 acres in Utah. The Northwestern Band of Shoshoni requires a permit to collect, research, study, and survey plants and animals. For an appl;ication, please wite to : Northwestern Band of Shoshoni, Leonard Alex, Chairman, Tribe, P.O. Box 850, Fort Hall, ID 83203; (208) 238-0916.

The SKULL VALLEY GOSHUTE TRIBE is of the Uto-Aztecan language. This Tribe encompasses approximately 17 thousand acres. The

Skull Valley Goshute Tribe requires a permit to collect, research, and survey plants and animals. For an application, please write to: Skull Valley Goshute Tribe, C/O Danny Quintana, Attorney, 395 South 600 East, Suite 200, Salt Lake City, UT 84102; (801) 363-7726.

The WHITE MESA UTE COUNCIL (UTE MOUNTAIN TRIBE) is of Uto-Aztecan language. The White Mesa Ute is noncontiguous land of the Ute Mountain Tribe. This Tribe encompasses approximately 7 thousand acres of trust and allotted land in Utah. The White Mesa Ute Council requires a permit to collect, research, and survey plants and animals. For an application, please write to: White Mesa Ute Council, Mary Jane Yazzie, Chairperson, P.O. Box 340, Blanding, UT 84511; (801) 678-3397.

BUREAU OF INDIAN AFFAIRS (BIA) is the trustee for the federally recognized Indian Tribes. BIA's mission has been to assist in development of full tribal capability and multi-disciplinary competence in the management and protection of tribal natural resources. Tribes are beginning to take over BIA programs and develop regulations for protecting their resources. These American Indian tribes are evolving in their abilities to govern themselves. The federal government recognized the sovereign status of the tribes. Indian tribes possess inherent governmental power over all internal affairs; states are precluded from interfering with the tribes in their self-government nations; but Congress has plenary power to limit tribal sovereignty.

UTAH DIVISION OF STATE LANDS AND FORESTRY POLICY AND REGULATIONS

The Utah Division of State Lands and Forestry has the authority to make determinations concerning the management, protection, and conservation of plant species officially designated as endangered or threatened under the federal Endangered Species Act of 1973, as amended, on State lands (Utah Code 65A-2-3). The Division's contact person for matters relating to this law is: Max Wall, Multiple Use and Sustained Yield Coordinator, Division of State Lands and Forestry, 3 Triad Center, Suite 400, Salt Lake City, Utah 84180-1204; (801) 538-5508.

THE UTAH NATURAL HERITAGE PROGRAM (UTHP) POLICY AND REGULATIONS

The Utah Natural Heritage Program is a central repository for data on locations, status and related information on Utah's rare species and natural communities. Staff scientists acquire data from existing sources such as herbaria, museums and the literature, and also gather new information from field surveys conducted cooperatively with federal agencies in Utah. The Program stores and updates the information in computerized, topographic-map, and manual file formats.

Information stored by the Heritage Program is available to everyone. Program services are used by government agencies, private industry and in-

dividuals for project planning and development purposes. In conjunction with the State's Resource Development Coordinating Committee, The Program reviews land-use projects and government policy proposals for their potential impacts on rare species and natural communities.

The Heritage Program is administratively part of the Utah Department of Natural Resources, though at present it is physically housed within the Division of State Lands and Forestry. Program contacts for rare-plant data or issues are: Joel Tuhy, Coordinator (801) 538-7228; Ben Franklin, Botanist (801) 538-7228; Joel Peterson, Data Manager (801) 538-7246; Utah Natural Heritage Program, Department of Natural Resources, 1630 West North Temple, Suite 316, Salt Lake City, UT 84116-3193.

U.S. FISH AND WILDLIFE SERVICE (USFWS) POLICY AND REGULATIONS

The USFWS has the lead responsibility for the endangered species program. Several offices within the Fish and Wildlife Service have responsibilities concerning the conservation of Endangered and Threatened Species. The Division of Fish and Wildlife Enhancement is responsible for the Services' Activities under; Section 4 of the Act (Listing and Recovery), Section 6 of the Act (Cooperation with the States), and Section 7 of the Act (Federal Interagency Cooperation). The Division of Law Enforcement is responsible for Service activities under Sections 9, 10 and 11 (Prohibited Acts, permits, and penalties and enforcement).

Projects with a "may affect" action for Federally listed species require formal consultation with the Fish and Wildlife Service. When an agency determines a "may affect" for a given project, supportive information documenting the "may affect" should be submitted to the appropriate agency authorities with a formal consultation request. The agency will then request a formal consultation with the USFWS for the specific project.

Utah is part of the Fish and Wildlife Services' Region 6, with headquarters in Denver, Colorado, which includes the Great Plains and Rocky Mountain States. The Salt Lake City Field Office, located at 1745 West 1700 South, has responsibility for the States of Colorado and Utah. This field office is responsible for developing proposed and final rules to list species as endangered or threatened. These listing determinations are based on the best scientific and commercial data available at the time a species is being proposed for listing.

The USFWS is responsible for developing candidate species lists. The latest Candidate plant list was published in the February 21, 1990 FR Vol. 55(35):6184-6229.

Agency resource offices should be conducting informal consultation with the USFWS on a regular basis to help insure project activities do not impact TES plants. Contact for the USFWS TES plant program in Utah is Larry England. He can be reached at (801) 524-1185 or FTS-588-4430.

ACKNOWLEDGEMENTS

Completion of this field guide was made possible as a result of contributions from several individuals and organizations. Information for the text came mainly from "A Utah Flora" (Welsh, et al 1987), the Utah State Natural Heritage Program, Forest Service Regional Office files, Bureau of Land Management State Office files, National Park Service files, TNC Tribal Lands Protection Program, Navajo Natural Heritage Program, Ute Indian Tribe Files, U. S. Fish and Wildlife Service flies, Utah Herbaria at Brigham Young University, Utah State University, and University of Utah.

We wish to thank Kezia Snyder, Larry Hayes, Norm Henderson, Jayne Belnap, Rick Harris, Steve Petersburg and Terese Johnson from the NPS, Jean Nitschke-Sinclair, Steve Hedges, Dave Young, Jack Brown and Daryl Trotter from the BLM, Karen Corts and Jason Cuch from the Ute Indian Tribe, the Navajo Heritage Program, the Paiute Indian Tribe of Utah, and Sadie Hoskie, EPA Indian Coordinator for their help in preparing this guide. Sharon Rollins provided greatly needed and valuable assistance throughout the preparation of the guide. Glenna Wright, Holly Vandre, Happy Pont, Jim Barney, and Bernice Hampton provided valuable help in typing the text. Joyce Stoddard, Robin Spahr, and Jeanne Felmy produced the camera ready copy for printing. Their assistance was invaluable in producing the final product. Dr. Stanley Welsh prepared many of the write-ups for the BLM species. Several individuals provided photographs and credit is acknowledged in the text by each photograph. The Colorado Native Plant Society assisted in obtaining slides of *Lygodesmia doloresensis*. Completion of this guide was possible as a result of Congressional earmarked dollars for the Forest Service TES plant program and funding assitance by the National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Environmental Protection Agency, and Indian Tribes of Utah.

We greatly acknowledge the valuable assistance of Kaye H. Thorne, Assistant Curator BYU Herbarium, for the preparation of all of the illustrations for this field guide. The illustrations are a significant part of the field guide and are of superior quality and workmanship. They provide detailed information not available through written descriptions. The illustrations were prepared under a short time frame and the quick response was invaluable. Without her assistance this field guide would not have been possible.

DEFINITIONS AND CODES

FEDERAL STATUS (55 Federal Register 6184, Feb. 21, 1990)

E Endangered - Taxa formally listed as endangered.

T Threatened- Taxa formally listed as threatened.

P Proposed E or T - taxa proposed to be formally listed as endangered or threatened

C1 Notice of Review, Category 1 (substantial biological information on file to support the appropriateness of proposing to list as endangered or threatened).

C2 Notice of Review, Category 2 (current information indicates that proposing to list as endangered or threatened is possible. Appropriate, but substantial biological information is not on file to support an immediate rulemaking).

C2* Category 2, and the taxon is possibly extinct.

3a Taxa for which the USFWS has persuasive evidence of extinction.

3b Names that, on the basis of current taxomonic understanding, do not represent taxa meeting the Endangered Species Act's definition of 'species.'

3c Taxa that have proven to be more abundant or widespread than was previously believed, and/or those that are not subject to any identifiable threat.

STATE NATURAL HERITAGE RANKS

GLOBAL RANK

G1 Critically imperiled globally because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction. (Critically endangered throughout range).

G2 Imperiled globally because of rarity (6 to 20 occurrences) or because of other factors demonstrably making it very vulnerable to extinction throughout its range. (Endangered throughout range).

G3 Either very rare and local throughout its range or found locally (even abundant at some of its locations) in a restricted range, or because of other factors making it vulnerable to extinction throughout its range; in the range of 21 to 100 occurrences (threatened throughout range).

G4 Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GU Possibly in peril range-wide, but status uncertain; more information needed.

GH Historically known; may be rediscovered.

GX Believed to be extinct throughout range; historical records only, continue search.

UTAH

Endangered, Threatened and Sensitive Plant List

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Aquilegia barnebyi Shale columbine	G3/S3	3C	BLM, FS
Arabis falcatoria Grouse Creek rockcress	G1/S1	C2	BLM
Arabis vivariensis Park rockcress	G1/S1	C2	FWS , BLM NPS?
Arctomecon humilis Dwarf bearclaw poppy	G1/S1	LE	BLM, S, P
Asclepias cutleri Cutler milkweed	G2/S2	3C	I, P, S, BLM, FS?, NPS?
Asclepias welshii Welsh's milkweed	G1/S1	LT	BLM, S
Asplenium adiantum-nigrum Black spleenwort	G5/S1	3B	NPS, BLM?
Aster kingii var. *barnebyana* Barneby woody aster	G3T1/S1	C2	FS
Aster kingii var. *kingii* King woody aster	G3T2/S2	3C	FS, NPS, P
Astragalus ampullarius Gumbo milkvetch	G2/S2	C2	BLM, P, I?
Astragalus anserinus Goose Creek milkvetch	G2/S1	C2	BLM, FS, P
Astragalus barnebyi Barneby milkvetch	G3Q/S2	3C	BLM
Astragalus consobrinus Bicknell milkvetch	G2G3/S2S3	3C	BLM, FS, NPS, S
Astragalus cronquistii Cronquist milkvetch	G2/S2	C2	BLM, I
Astragalus desereticus Deseret mikvetch	G1/S1	C1	P, S

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Astragalus equisolensis Horseshoe milkvetch	G1/S1	C1	BLM
Astragalus eremiticus var. *ampullarioides* Shem milkvetch	G5T1/S1	C2	I, BLM?
Astragalus hamiltonii Hamilton milkvetch	G1/S1	C2	NPS, BLM, I, S, P
Astragalus henrimontanensis Dana milkvetch	G2/S2	3C	BLM, FS, P, S?
Astragalus holmgreniorum Holmgren milkvetch	G1/S1	C2	BLM, P
Astragalus iselyi Isely milkvetch	G1G2/S1S2	C2	BLM, FS, S
Astragalus limnocharis var. *limnocharis* Navajo Lake milkvetch	G1T1/S1	C2	FS, P, NPS
Astragalus limnocharis var. *tabulaeus* Table Cliff milkvetch	G1T1/S1	C2	FS
Astragalus lutosus Dragon milkvetch	G4/S3	3C	BLM, FS, P, S
Astragalus montii Heliotrope milkvetch	G1Q/S1	LT	FS
Astragalus monumentalis Monument milkvetch	G2/S2	3C	BLM, NPS, I, S, FS?
Astragalus oophorus var. *lonchocalyx* Pink egg milkvetch	G4T2/S2	C2	BLM
Astragalus perianus Rydberg milkvetch	G3/S3	3C	FS, P, S
Astragalus preussii var. *cutleri* Copper Canyon milkvetch	G4T1/S1	C2	I, NPS, BLM?
Astragalus sabulosus Cisco milkvetch	G1/S1	C2	BLM, S, NPS?

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Astragalus serpens Plateau milkvetch	G1/S1	C2	FS, BLM, S, P
Astragalus subcinereus var. *basalticus* Basalt milkvetch	G3T1Q/S1	C2	BLM, NPS?
Astragalus uncialis Current milkvetch	G2/S2	C2	BLM
Astragalus wetherillii Wetherill's milkvetch	G3/SH	C2	BLM, P
Atriplex canescens var. *gigantea* Giant four-wing saltbush	G5T1/S1	C2	BLM
Camissonia atwoodii Atwood's camissonia	G1/S1	C2	NPS, BLM
Camissonia exilis Slender camissonia	G2/S1	C2	BLM
Carex curatorum Canyonlands sedge	G5Q/S1		BLM, FS, NPS, I?
Carex leptalea Bristle-stalk sedge	G5/S1		FS
Carex specuicola Navajo sedge	G1/S1	LT	I, NPS?
Castilleja aquariensis Aquarius paintbrush	G2/S2	C1	FS
Castilleja parvula var. *parvula* Tushar paintbrush	G2T1/S1	3C	FS, P
Castilleja parvula var. *revealii* Reveal paintbrush	G2T1/S1	C2	FS, NPS
Cirsium ownbeyi Ownbey thistle	G1/S1	C2	NPS, BLM
Cirsium virginensis Virgin thistle	G1/S1	C2	BLM, P

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Cryptantha caespitosa Tufted cryptanth	G3/S2	3C	BLM, FS
Cryptantha cinerea var. *arenicola* Sand-dwelling cryptanth	G5?T?/S2	C2	BLM
Cryptantha compacta Mound cryptanth	G3/S3	C2	BLM, FS, S, NPS
Cryptantha creutzfeldtii Creutzfeldt-flower	G2/S2	C2	BLM, FS, P
Cryptantha ochroleuca Yellow-white catseye	G1G2/S1S2	C2	FS, NPS, BLM, S, P
Cuscuta warneri Warner's dodder	GH/SH	C2	P, BLM?
Cycladenia humilis var. *jonesii* Jones cycladenia	G2G3T2/S2	LT	BLM, NPS
Cymopterus acaulis var. *higginsii* Higgins biscuitroot	G5T1/S1	C2	BLM, NPS
Cymopterus beckii Pinnate spring-parsley	G1/S1	C2	BLM, FS, NPS
Cymopterus coulteri Coulter biscuitroot	G3/S3	3C	BLM, FS, P, S
Cymopterus minimus Cedar Breaks biscuitroot	G3/S3	C2	NPS, FS?
Cypripedium fasciculatum Brownie ladyslipper	G3/S1		FS
Dalea flavescens var. *epica* Hole-in-the-rock prairie clover	G5T2Q/S2	C2	NPS, BLM
Draba kassii Kass rockcress	G1/S1	C2	BLM
Draba maguirei Maguire draba	G2/S2	3C	FS

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Draba pectiniphila Woods draba	G?/S?	3C	NPS, BLM, P
Draba sobolifera Creeping draba	G2/S2	3C	FS, P
Echinocereus triglochidiatus var. *inermis* Spineless hedgehog cactus	G5T2Q/S2	LE	BLM, FS
Epilobium nevadense Nevada willowherb	G2/S1	C2	BLM, FS, NPS
Erigeron canaani Canaan daisy	G1Q/S1	C2	NPS, BLM
Erigeron carringtonae Carrington daisy	G1/S1	C2	FS
Erigeron cronquistii Cronquist daisy	G2/S2	C2	FS, BLM, S
Erigeron kachinensis Kachina daisy	G1/S1	C2	BLM, FS, NPS, S
Erigeron maguirei var. *harrisonii* Harrisons' daisy	G1T1/S1	C2	NPS
Erigeron maguirei var. *maguirei* Maguires' daisy	G1T1/S1	LE	BLM
Erigeron mancus LaSal daisy	G2/S2	C2	FS
Erigeron sionis Zion daisy	G2/S2	C2	NPS, BLM
Erigeron untermannii Untermann daisy	G2/S2	C2	FS, I, P, S
Erigeron zothecinus Alcove daisy	G1/S1	C2	NPS
Eriogonum aretioides Widtsoe buckwheat	G1/S1	C2	FS, P, NPS, S?

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Eriogonum batemanii var. *eremicum* Hermit buckwheat	G?T2/S2		BLM, FS
Eriogonum batemanii var. *ostlundii* Elsinore buckwheat	G?T3/S3	3C	BLM, FS, S, P
Eriogonum brevicaule var. *loganum* Logan buckwheat	G4T2/S2	3C	FS, P
Eriogonum corymbosum var. *cronquistii* Cronquist wild buckwheat	G5T1/S1	C2	BLM
Eriogonum corymbosum var. *smithii* Smith wild buckwheat	G4T2/S2	C2	BLM, NPS?
Eriogonum nummulare var. *ammophilum* Ibex buckwheat	G4T1/S1	C2	BLM, FS, S, P
Eriogonum soredium Frisco buckwheat	G1/S1	C2	BLM, P
Festuca dasyclada Sedge fescue	G3/S1	3C	FS, BLM
Gilia caespitosa Rabbit Valley gilia	G1/S1	C1	NPS, P, BLM, FS?
Gilia spicata Spike gilia	G4?/S1		FS
Gilia tenuis Mussentuchit gilia	G1/S1	C2	BLM, NPS?
Gutierrezia petradoria Goldenrod snakeweed	G2/S2	C2	FS
Habenaria zothecina Alcove bog-orchid	G1/S1	C2	BLM, NPS
Hackelia ibapensis Deep Creek Stickseed	G1Q/S1	C2	BLM, I?

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Haplopappus crispus Pine Valley goldenbush	G2/S2	C2	FS, BLM?
Haplopappus zionis Cedar Breaks goldenbush	G2/S2	C2	NPS, FS
Hedysarum occidentale var. *canone* Canyon sweetvetch	G5T2Q/S2	C2	BLM, FS, P
Heterotheca jonesii Jones golden aster	G2/S2	C2	BLM, FS, NPS
Hymenoxys depressa Low hymenoxys	G3G4/S3S4	C2	FS, BLM, NPS, S
Hymenoxys helenioides Helenium hymenoxys	G3Q/S3	3B	FS
Hymenoxys lapidicola Rock hymenoxys	G1/S1	C2	NPS, BLM
Iris pariensis Paria iris	G1/S1	C2	BLM?, S?
Jamesia americana var. *zionis* Cliff jamesia	G5T1?/S1?	C2	BLM, NPS
Jamesia tetrapetala Four-petal jamesia	G2/S1	C2	BLM
Lepidium barnebyanum Barneby peppergrass	G1/S1	LE	I, P?
Lepidium montanum var. *neeseae* Neeses' peppergrass	G4T1/S1	3C	FS, BLM
Lepidium montanum var. *stellae* Stellas' peppergrass	G4T1/S1	C1	BLM
Lepidium ostleri Ostler peppergrass	G1/S1	C2	BLM, P
Lesquerella garrettii Garrett bladderpod	G2/S2	C2	FS, P, NPS?, BLM?

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Lesquerella tumulosa Kodachrome bladderpod	G1/S1	C2	BLM, S
Lomatium latilobum Canyonlands lomatium	G1/S1	C2	BLM, FS, NPS, P
Lupinus crassus Thick-leaved lupine	G?/S?	C2	P, FS?
Lygodesmia doloresensis Dolores River skeletonplant	G1/S1	C2	BLM
Lygodesmia entrada Entrada skeletonplant	G1/S1	3B	BLM, NPS
Mentzelia argillosa Southwestern stickleaf	G2?/S1	3C	BLM, P
Mentzelia multicaulis var. *librina* Book Cliffs blazing star	G?T1/S1	C2	BLM
Mentzelia shultziorum Shultz stickleaf	G1/S1	C2	BLM
Musineon lineare Rydberg musineon	G2/S2	C2	FS, P, BLM?
Najas caespitosa Fish Lake naiad	GH/SH	C2	FS
Oenothera flava var. *acutissima* Yellow evening-primrose	G5T3/S2	3C	BLM, FS, NPS, P
Oreoxis trotteri Trotter oreoxis	G1/S1	C2	BLM, NPS
Ostrya knowltonii Western hophornbeam	G?/S?		NPS, BLM
Papaver radicatum var. *pygmaeum* Arctic poppy	G5T1/S1		FS
Parrya rydbergii Uinta parrya	G2Q/S2		FS

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Pediocactus despainii Despain footcactus	G2/S2	LE	BLM, NPS
Pediocactus sileri Siler pincushion cactus	G3/S1	LE	BLM, P, S
Pediocactus winkleri Winkler footcactus	G1/S1	C1	BLM, NPS
Pediomelum epipsilum Kane breadroot	G1/S1	C2	BLM, P
Pediomelum pariense Paria breadroot	G1/S1	C2	BLM, FS, NPS, P
Penstemon acaulis var. *acaulis* Stemless beardtongue	G3T2/S2	3C	BLM, FS, P, S
Penstemon ammophilus Canaan Mountain beardtongue	G2?/S2?	C2	BLM, NPS
Penstemon angustifolius var. *dulcis* Neese narrowleaf penstemon	G5T2/S2	C2	BLM
Penstemon atwoodii Atwood's beardtongue	G2G3/S2S3	C2	BLM, NPS?
Penstemon bracteatus Red Canyon beardtongue	G2/S2	C2	FS, NPS, S, P
Penstemon concinnus Elegant penstemon	G3/S3	C2	BLM, FS, S
Penstemon cyananthus var. *compactus* Cache beardtongue	G4T2T3/S2S3	C2	FS, P?, S?
Penstemon flowersii Flowers' beardtongue	G2/S2	C2	BLM, I, P
Penstemon gibbensii Gibben's beardtongue	G1/S1	C2	BLM, S, NPS, P?
Penstemon goodrichii Goodrich penstemon	G2/S2	C2	BLM, I

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Penstemon grahamii Graham beardtongue	G2/S2	C1	BLM, I?, S, P
Penstemon idahoensis Idaho penstemon	G?/S1	C2	BLM, P, FS
Penstemon nanus Low beardtongue	G3/S3	3C	BLM, FS, S
Penstemon navajoa Navajo Mountain penstemon	G1G2/S1	C2	I
Penstemon parvus Little penstemon	G2/S2	C2	FS, S
Penstemon pinorum Pinyon penstemon	G1/S1	C2	BLM, FS, S, P?
Penstemon scariosus var. *albifluvis* White River penstemon	G4T2/S2	C1	BLM
Penstemon tidestromii Tidestrom beardtongue	G2/S2	C2	BLM, FS, P, S?
Penstemon uintahensis Uinta beardtongue	G3/S3	3C	FS
Penstemon wardii Ward beardtongue	G2/S2	C2	BLM, FS, P
Perityle specuicola Alcove rock-daisy	G1/S1	C2	BLM, NPS
Phacelia argillacea Clay phacelia	G1/S1	LE	P, S, FS?, T
Phacelia howelliana Howell scorpion weed	G2/S2	3C	I, NPS, BLM
Phacelia indecora Drab phacelia	G1Q/S1	3C	BLM?, P?
Phacelia utahensis Utah phacelia	G2/S2	3C	BLM
Podistera eastwoodiae Eastwood podistera	G?/S1		FS

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Potentilla cottamii Cottam cinquefoil	G1/S1	C2	BLM, FS
Potentilla palustris Marsh cinquefoil	G5/S1		FS
Primula domensis House Range primrose	G1/S1	C2	BLM
Primula maguirei Maguire primrose	G1/S1	LT	FS
Proatriplex pleiantha Four-corners orach	G1/S1	C2	I, BLM?
Psorothamnus polydenius var. *jonesii* Jones indigo-bush	G5T1/S1	C2	BLM
Psorothamnus thomsoniae var. *whitingii* Thompson's indigobush	G3T2/S1	C2	NPS, I
Ranunculus acris var. *aestivalis* (=*Ranunculus acriformis* var. *aestivalis*) Autumn buttercup	G5T1/S1	LE	T
Schoencrambe argillacea Clay thelypody	G1/S1	PE	BLM, I?, P?
Schoencrambe barnebyi Barneby thelypody	G1/S1	PE	NPS, BLM
Schoencrambe suffrutescens (=*Glaucocarpum suffrutescens*) Shrubby reed-mustard	G1/S1	LE	BLM, I, S, P
Sclerocactus glaucus (=*Sclerocactus whipplei* var. *glaucus*) Uinta basin hookless cactus	G3Q/S3	LT	BLM, I, S, FWS
Sclerocactus pubispinus var. *pubispinus* Great Basin fishhook cactus	G4T4/S3	3C	BLM, FS, P, S

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Sclerocactus wrightiae Wright fishhook cactus	G1/S1	LE	BLM, NPS, S, P
Selaginella utahensis Utah spike-moss	G2/S2	C2	NPS, BLM
Silene petersonii Maguire campion	G3/S3	C2	FS, NPS, BLM
Sphaeralcea caespitosa Jones globemallow	G3/S3	C2	BLM, FS, S?
Sphaeralcea psoraloides Psoralea globemallow	G2?/S2?	C2	BLM
Sphaeromeria capitata Rock-tansy	G3/S1		FS, P
Sphaeromeria ruthiae Zion tansy	G2/S2	C2	NPS, BLM
Spiranthes diluvialis Ute lady's tresses	G2/S1	PT	NPS, BLM, FS?
Talinum thompsonii Thompsons' pink flame-flower	G1/S1	C2	BLM
Thelesperma pubescens Uinta green thread	G1/S1	C2	FS
Thelesperma subnudum var. *alpinum* Bicknell thelesperma	G?T1/S1	C2	BLM, NPS, FS
Townsendia aprica Last chance townsendia	G1/S1	LT	BLM, FS, NPS, S
Townsendia jonesii var. *lutea* Sevier townsendia	G2T1/S1	C2	BLM, FS
Trautvetteria caroliniensis False bugbane	G4G5/S1		FS
Trifolium andersonii var. *friscanum* Frisco clover	G3G4T1/S1	C2	BLM, P

Scientific Name Common Name	G/S Rank*	Federal Status	Agency Distribution**
Viola purpurea var. *charlestonensis* Charleston Mountain violet	G5T2/S2	3C	NPS, FS
Xylorhiza cronquistii Cronquist woodyaster	G1/S1	C2	BLM

* Global Rank/State Rank

**Agency Distribution - BLM=Bureau of Land Management, FS=USDA Forest Service, I=Indian, NPS=National Park Service Unit, P=Private, S=State Land, T=The Nature Conservancy, FWS=USDI Fish & Wildlife Service, PT=Proposed Threatened, PE=Proposed Endangered, ?=Might occur, UDOT=Utah Department of Transportation

FOREST SERVICE
Threatened, Endangered, and Sensitive Plant List

Scientific Name	Common Name	Distribution By Forest							
		ASH	DER	DIX	FLK	ML	SAW	UI	WC
Aquilegia barnebyi	Shale columbine	Y							
Asclepias cutleri	Cutler milkweed					?			
Aster kingii var. *barnebyana*	Barneby woody aster				Y				
Aster kingii var. *kingii*	King woody aster							Y	Y
Astragalus anserinus	Goose Creek milkvetch						Y		
Astragalus consobrinus	Bicknell milkvetch				Y				
Astragalus henrimontanensis	Dana milkvetch			Y					
Astragalus iselyi	Isley milkvetch					Y			
Astragalus limnocharis var. *limnocharis*	Navajo Lake milkvetch			Y					
Astragalus limnocharis var. *tabulaeus*	Table Cliff milkvetch			Y					
Astragalus lutosus	Dragon milkvetch	?						Y	
Astragalus montii	Heliotrope milkvetch					Y			
Astragalus monumentalis	Monument milkvetch					Y			
Astragalus perianus	Rydberg milkvetch			Y	Y				
Astragalus serpens	Plateau milkvetch				Y				
Carex curatorum	Canyonlands sedge					Y			
Carex leptalea	Bristle stalk sedge	Y							
Castilleja aquariensis	Aquarius paintbrush			Y					
Castilleja parvula var. *parvula*	Tushar paintbrush			Y	Y				

Scientific Name	Common Name	Distribution By Forest							
		ASH	DER	DIX	FLK	ML	SAW	UI	WC
Castilleja parvula var. *revealii*	Reveal paintbrush			Y					
Cryptantha caespitosa	Tufted cryptanth	Y							
Cryptantha compacta	Mound cryptanth		Y		Y				Y
Cryptantha creutzfeldtii	Creutzfeldt-flower					Y			
Cryptantha ochroleuca	Yellow-white catseye			Y					
Cymopterus beckii	Pinnate spring-parsley					Y			
Cymopterus coulteri	Coulter biscuitroot			Y	Y				
Cymopterus minimus	Cedar Breaks biscuitroot				?				
Cypripedium fasciculatum	Brownie ladyslipper	Y							
Draba maguirei	Maguire draba								Y
Draba sobolifera	Creeping draba			Y	Y				
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus					Y			
Epilobium nevadense	Nevada willowherb				Y				
Erigeron carringtonae	Carrington daisy					Y			
Erigeron cronquistii	Cronquist daisy								Y
Erigeron kachinensis	Kachina daisy					Y			
Erigeron mancus	LaSal daisy					Y			
Erigeron untermannii	Untermann daisy	Y							
Eriogonum aretioides	Widtsoe buckwheat			Y					
Eriogonum batemanii var. *eremicum*	Hermit buckwheat		Y						
Eriogonum batemanii var. *ostlundii*	Elsinore buckwheat				Y				

Scientific Name	Common Name	Distribution By Forest							
		ASH	DER	DIX	FLK	ML	SAW	UI	WC
Eriogonum brevicaule var. *loganum*	Logan buckwheat								Y
Eriogonum nummulare var. *ammophilum*	Ibex buckwheat		Y						
Festuca dasyclada	Sedge fescue			Y		Y		Y	
Gilia caespitosa	Rabbit Valley gilia			Y					
Gilia spicata	Spike gilia	Y							
Gutierrezia petradoria	Goldenrod snakeweed				Y				
Haplopappus crispus	Pine Valley golden-bush			Y					
Haplopappus zionis	Cedar Breaks golden-bush			Y		Y			
Hedysarum occidentale var. *canone*	Canyon sweetvetch					Y			
Heterotheca jonesii	Jones goldenaster			Y					
Hymenoxys depressa	Low hymenoxys	Y		Y	Y	Y			
Hymenoxys helenioides	Helenium hymenoxys			Y	Y	Y			
Lepidium montanum var. *neeseae*	Neeses' peppergrass			Y					
Lesquerella garrettii	Garrett bladderpod							Y	Y
Lomatium latilobum	Canyonlands lomatium					Y			
Lupinus crassus	Thick-leaved lupine					?			
Musineon lineare	Rydberg musineon								Y
Najas caespitosa	Fish Lake naiad				Y				
Oenothera flava var. *acutissima*	Yellow evening-primose	Y							

Scientific Name	Common Name	Distribution By Forest							
		ASH	DER	DIX	FLK	ML	SAW	UI	WC
Papaver radicatum var. *pygmaeum*	Arctic poppy	Y							Y
Parrya rydbergii	Uinta parrya	Y							Y
Pediomelum pariense	Paria breadroot			Y					
Penstemon acaulis var. *acaulis*	Stemless beardtongue	Y							
Penstemon bracteatus	Red Canyon beard-tongue			Y					
Penstemon concinnus	Elegant penstemon		Y						
Penstemon cyananthus var. *compactus*	Cache beardtongue								Y
Penstemon idahoensis	Idaho penstemon						Y		
Penstemon nanus	Low beardtongue		Y						
Penstemon parvus	Little penstemon			Y	Y				
Penstemon pinorum	Pinyon penstemon			Y					
Penstemon tidestromii	Tidestrom beard-tongue					Y		?	
Penstemon uintahensis	Uinta beardtongue	Y							Y
Penstemon wardii	Ward beardtongue				Y				
Phacelia argillacea	Clay phacelia					?		?	
Podistera eastwoodiae	Eastwood podistera					Y			
Potentilla cottamii	Cottam cinquefoil						Y		
Potentilla palustris	Marsh cinquefoil	Y							
Primula maguirei	Maguire primrose								Y
Sclerocactus pubispinus var. *pubispinus*	Great Basin fishhook cactus		Y		?				

Scientific Name	Common Name	Distribution By Forest							
		ASH	DER	DIX	FLK	ML	SAW	UI	WC
Silene petersonii	Maguire campion			Y		Y			
Sphaeralcea caespitosa	Jones globemallow		Y						
Sphaeromeria capitata	Rock-tansy			Y					
Spiranthes diluvalis	Ute lady's tresses	?		?	?	?		?	?
Thelesperma pubescens	Uinta green thread								Y
Thelesperma subnudum var. *alpinum*	Bicknell thelesperma			Y	Y				
Townsendia aprica	Last Chance townsendia				Y				
Townsendia jonesii var. *lutea*	Sevier townsendia				Y				
Trautvetteria caroliniensis	False bugbane					Y			
Viola purpurea var. *charlestonensis*	Charleston Mtn. violet			Y					

Code: Y=occurs on the forest, ?=might occur on the forest,
ASH=Ashley NF, DER=Desert Range Experiment Station,
DIX=Dixie NF, FLK=Fishlake NF, ML=Manti-Lasal NF,
SAW=Sawtooth NF, UI=Uinta NF, WC=Wasatch-Cache NF

TES Plant Species of the Ashley National Forest

Scientific Name	Common Name	Districts			
		DUCH	FGNRA	Roosevelt	Vernal
Aquilegia barnebyi	Shale columbine	Y			
Astragalus lutosus	Dragon milkvetch	?			
Carex leptalea	Bristle stalk sedge			Y	Y
Cryptantha caespitosa	Tufted cryptanth		Y		
Cypripedium fasciculatum	Brownie ladyslipper		Y		Y
Erigeron untermannii	Untermann daisy	Y			
Gilia spicata	Spike gilia	Y	Y		
Hymenoxys depressa	Low hymenoxys	Y	Y	Y	
Oenothera flava var. *acutissima*	Yellow evening-primrose		Y		Y
Papaver radicatum var. *pygmaeum*	Arctic poppy	Y		Y	Y
Parrya rydbergii	Uinta parrya	Y	Y	Y	Y
Penstemon acaulis var. *acaulis*	Stemless beardtongue		Y		
Penstemon uintahensis	Uinta beardtongue	Y	Y	Y	Y
Potentilla palustris	Marsh cinquefoil				Y
Spiranthes diluvialis	Ute lady's tresses				?

Code: ?=might occur on forest, Y=occurs on forest
DUCH=Duchesne, FGNRA=Flaming Gorge National Recreation Area

TES Plant Species on the Desert Range Experiment Station

Scientific Name	Common Name	Occurs	May Occur
Cryptantha compacta	Mound cryptanth	Y	
Eriogonum batemanii var. *eremicum*	Hermit buckwheat	Y	
Eriogonum nummulare var. *ammophilum*	Ibex buckwheat	Y	
Penstemon concinnus	Elegant penstemon	Y	
Penstemon nanus	Low beardtongue	Y	
Sclerocactus pubispinus var. *pubispinus*	Great Basin fishhook cactus	Y	
Sphaeralcea caespitosa	Jones globemallow	Y	

TES Plant Species on the Dixie National Forest

Scientific Name	Common Name	DIstricts					
		CEDAR	ESCAL	PV	POW	TEAS	
Astragalus henrimontanensis	Dana milkvetch		Y				
Astragalus limnocharis var. *limnocharis*	Navajo Lake milkvetch	Y			Y		
Astragalus limnocharis var. *tabulaeus*	Table Cliff milkvetch				Y		
Astragalus perianus	Rydberg milkvetch				Y		
Castilleja aquariensis	Aquarius paintbrush		Y			Y	
Castilleja parvula var. *parvula*	Tushar paintbrush	Y			?		
Castilleja parvula var. *revealii*	Reveal paintbrush	Y	?		Y	?	
Cryptantha ochroleuca	Yellow-white catseye				Y		
Cymopterus coulteri	Coulter biscuitroot				Y		
Cymopterus minimus	Cedar Breaks biscuitroot	?					
Draba sobolifera	Creeping draba	Y			Y		
Eriogonum aretioides	Widtsoe buckwheat		Y		Y	?	
Festuca dasyclada	Sedge fescue		Y				
Gilia caespitosa	Rabbit Valley gilia					?	
Haplopappus crispus	Pine Valley goldenbush			Y			
Haplopappus zionis	Cedar Breaks goldenbush	Y	Y		Y		
Heterotheca jonesii	Jones goldenaster		Y			?	
Hymenoxys depressa	Low hymenoxys				Y	Y	
Hymenoxys helenioides	Helenium hymenoxys		Y				

Scientific Name	Common Name	Districts					
		CEDAR	ESCAL	PV	POW	TEAS	
Lepidium montanum var. *neeseae*	Neeses' peppergrass		Y		Y		
Pediomelum pariense	Paria breadroot			Y	Y		
Penstemon bracteatus	Red Canyon beardtongue				Y		
Penstemon parvus	Little penstemon		Y			?	
Penstemon pinorum	Pinyon penstemon			Y			
Silene petersonii	Maguire campion	Y			Y		
Sphaeromeria capitata	Rock-tansy				Y		
Spiranthes diluvialis	Ute lady's tresses		?				
Thelesperma subnudum var. *alpinum*	Bicknell thelesperma					Y	
Viola purpurea var. *charlestonensis*	Charleston Mountain violet	Y					

Code: ?=might occur on the forest, Y=occurs on the forest, CEDAR=Cedar City, ESCAL=Escalante, PV=Pine Valley, POW=Powell, TEAS=Teasdale

TES Plant Species on the Fishlake National Forest

Scientific Name	Common Name	Districts			
		Beaver	Fillmore	Loa	RICHF
Aster kingii var. *barnebyana*	Barneby woody aster		Y		
Astragalus consobrinus	Bicknell milkvetch	Y			
Astragalus perianus	Rydberg milkvetch	Y		Y	
Astragalus serpens	Plateau milkvetch			Y	
Castilleja parvula var. *parvula*	Tushar paintbrush	Y			
Cryptantha compacta	Mound cryptanth		Y		
Cymopterus coulteri	Coulter biscuitroot	?			
Draba sobolifera	Creeping draba	Y			
Epilobium nevadense	Nevada willowherb		Y		
Eriogonum batemanii var. *ostlundi*	Elsinore buckwheat	Y	Y		Y
Gutierrezia petradoria	Goldenrod snakeweed		Y		
Hymenoxys depressa	Low hymenoxys		Y		Y
Hymenoxys helenioides	Helenium hymenoxys				Y
Najas caespitosa	Fish Lake naiad			Y	
Penstemon parvus	Little penstemon			Y	
Penstemon wardii	Ward beardtongue			Y	Y
Sclerocactus pubispinus var. *pubispinus*	Great Basin fishhook cactus	?	?		
Spiranthes diluvialis	Ute lady's tresses			?	
Thelesperma subnudum var. *alpinum*	Bicknell thelesperma			Y	

Scientific Name	Common Name	Districts			
		Beaver	Fillmore	Loa	RICHF
Townsendia aprica	Last chance townsendia			Y	
Townsendia jonesii var. *lutea*	Sevier townsendia				Y

Code: Y=occurs on the forest, ?=might occur on the forest
RICHF=Richfield

TES Plant Species on the Manti-LaSal National Forest

Scientific Name	Common Name	Districts				
		FER	Moab	MONT	Price	Sanpete
Asclepias cutleri	Cutler milkweed		?	?		
Astragalus iselyi	Isley milkvetch		Y			
Astragalus montii	Heliotrope milkvetch	Y				
Astragalus monumentalis	Monument milkvetch			Y		
Carex curatorum	Canyonlands sedge	Y			Y	
Cryptantha creutzfeldtii	Creutzfeldt-flower	Y				
Cymopterus beckii	Pinnate spring-parsley		?	Y		
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus		Y			
Erigeron carringtonae	Carrington daisy	Y				
Erigeron kachiensis	Kachina daisy			Y		
Erigeron mancus	LaSal daisy		Y			
Festuca dasyclada	Sedge fescue	Y				
Haplopappus zionis	Cedar Breaks goldenbush		Y			
Hedysarum occidentale var. *canone*	Canyon sweetvetch	Y			Y	
Hymenoxys depressa	Low hymenoxys	Y				
Hymenoxys helenioides	Helenium hymeonxys	Y			Y	
Lomatium latilobum	Canyonlands lomatium		Y	Y		
Lupinus crassus	Thick-leaved lupine		?			
Penstemon tidestromii	Tidestrom beardtongue					Y

Scientific Name	Common Name	Districts				
		FER	Moab	MONT	Price	Sanpete
Phacelia argillacea	Clay phacelia					?
Podistera eastwoodiae	Eastwood podistera		Y			
Silene petersonii	Maguire campion	Y				
Spiranthes diluvialis	Ute lady's tresses		?	?		
Trautvetteria caroliniensis	False bugbane			Y		

Code: ?=might occur on the forest, Y=occurs on the forest, FER=Ferron, MONT=Monticello

TES Plant Species on the Sawtooth National Forest

Scientific Name	Common Name	Occurs	May Occur
Astragalus anserinus	Goose Creek milkvetch	Y	
Penstemon idahoensis	Idaho pesntemon	Y	
Potentilla cottamii	Cottam cinquefoil	Y	

TES Plant Species on the Uinta National Forest

Scientific Name	Common Name	Districts		
		Heber	PLEASANT	Spanish Fork
Aster kingii var. *kingii*	King woody aster		Y	Y
Astragalus lutosus	Dragon milkvetch	Y		
Festuca dasyclada	Sedge fescue	Y		
Lesquerella garrettii	Garrett bladderpod		Y	Y
Penstemon tidestromii	Tidestrom beardtongue			?
Phacelia agrillacea	Clay phacelia			?
Spiranthes diluvialis	Ute lady's tresses		?	?

Code: ?=might occur on the forest, Y = occurs on the forest,
PLEASANT=Pleasant Grove

TES Plant Species on the Wasatch-Cache National Forest

Scientific Name	Common Name	Districts					
		EVAN	Kamas	Logan	MV	OG	SL
Aster kingii var. *kingii*	King woody aster					?	Y
Cryptantha compacta	Mound cryptanth						Y
Cypripedium fasciculatum	Brownie ladyslipper	?	?		?		
Draba maguirei	Maguire draba			Y			
Erigeron cronquistii	Cronquist daisy			Y			
Eriogonum brevicaule var. *loganum*	Logan buckwheat			Y			
Lesquerella garrettii	Garrett bladderpod					?	Y
Musineon lineare	Rydberg musineon			Y			
Papaver radicatum var. *pygmaeum*	Arctic poppy	?	?		Y		
Parrya rydbergii	Uinta parryi	Y	?		Y		
Penstemon cyananthus var. *compactus*	Cache beardtongue			Y		Y	?
Penstemon uintahensis	Uinta beardtongue	Y	?		Y		
Primula maguirei	Maguire primrose	Y					
Spiranthes diluvialis	Ute lady's tresses						?
Thelesperma pubescens	Uinta green thread				Y		

Code: ?=might occur on the forest, x=occurs on the forest,
EVAN=Evanston, MV=MountainView, OG=Ogden, SL=Salt Lake

BUREAU OF LAND MANAGEMENT
Threatened, Endangered, and Sensitive Plant List

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Aquilegia barnebyi	Shale columbine					Y
Arabis falcatoria	Grouse Creek rockcress				Y	
Arabis vivariensis	Park rock cress					Y
Arctomecon humilis	Dwarf bearclaw poppy	Y				
Asclepias cutleri	Cutler milkweed		Y			
Asclepias welshii	Welsh's milkweed	Y				
Asplenium adiantum-nigrum	Black spleenwort	?				
Astragalus ampullarius	Gumbo milkvetch	Y				
Astragalus anserinus	Goose creek milkvetch				Y	
Astragalus barnebyi	Barneby milkvetch			Y		
Astragalus consobrinus	Bicknell milkvetch		Y	Y		
Astragalus cronquistii	Cronquist milkvetch		Y			
Astragalus equisolensis	Horseshoe milkvetch					Y
Astragalus eremiticus var. *ampullarioides*	Shem milkvetch	?				
Astragalus hamiltonii	Hamilton milkvetch					Y
Astragalus henrimontanensis	Dana milkvetch			Y		
Astragalus holmgreniorum	Holmgren milkvetch	Y				
Astragalus iselyi	Isely milkvetch		Y			

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Astragalus lutosus	Dragon milkvetch					Y
Astragalus monumentalis	Monument milkvetch	Y	Y	Y		
Astragalus oophorus var. *lonchocalyx*	Pink egg milkvetch	Y				
Astragalus preussii var. *cutleri*	Copper Canyon milkvetch		?			
Astragalus sabulosus	Cisco milkvetch		Y			
Astragalus serpens	Plateau milkvetch			Y		
Astragalus subcinereus var. *basalticus*	Basalt milkvetch		Y	Y		
Astragalus unicalis	Current milkvetch			Y		
Astragalus wetherillii	Wetherill's milkvetch		Y			
Atriplex canescens var. *gigantea*	Giant four-wing saltbush			Y		
Camissonia atwoodii	Atwoods' camissonia	Y				
Camissonia exilis	Slender camissonia	Y				
Carex curatorum	Canyonlands sedge	Y	Y			
Cirsium ownbeyi	Ownbey thistle					Y
Cirsium virginensis	Virgin thistle	Y				
Cryptantha caespitosa	Tufted cryptanth				Y	Y
Cryptantha cinerea var. *arenicola*	Sand-dwelling cryptanth	Y				
Cryptantha compacta	Mound cryptanth	Y		Y	Y	
Cryptantha creutzfeldtii	Creutzfeldt-flower		Y			

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Cryptantha ochroleuca	Yellow-white catseye	Y				
Cuscuta warneri	Warner's dodder			?		
Cycladenia humilis var. *jonesii*	Jones cycladenia	Y	Y	Y		
Cymopterus acaulis var. *higginsii*	Higgins biscuitroot	Y				
Cymopterus beckii	Pinnate spring-parsley		Y	?		
Cymopterus coulteri	Coulter biscuitroot			Y	Y	
Dalea flavescens var. *epica*	Hole-in-the-rock prairie clover	Y	Y	Y		
Draba kassii	Kass rockcress			Y	Y	
Draba pectiniphila	Woods draba					Y
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus	?	Y			
Epilobium nevadense	Nevada willowherb	Y		Y		
Erigeron canaani	Canaan daisy	Y				
Erigeron cronquistii	Cronquist daisy				Y	
Erigeron kachinensis	Kachina daisy		Y			
Erigeron maguirei var. *maguirei*	Maguires' daisy		Y			
Erigeron sionis	Zion daisy	Y				
Eriogonum batemanii var. *eremicum*	Hermit buckwheat	Y		Y		
Eriogonum batemanii var. *ostlundii*	Elsinore buckwheat			Y		

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Eriogonum corymbosum var. *cronquistii*	Cronquist wild buckwheat			Y		
Eriogonum corymbosum var. *smithii*	Smith wild buckwheat		Y	Y		
Eriogonum nummulare var. *ammophilum*	Ibex buckwheat			Y		
Eriogonum soredium	Frisco buckwheat	Y				
Festuca dasyclada	Sedge fescue					Y
Gilia caespitosa	Rabbit Valley gilia			Y		
Gilia tenuis	Mussentuchit gilia		Y	Y		
Habenaria zothecina	Alcove bog-orchid	Y	Y			
Hackelia ibapensis	Deep Creek stickseed			Y	Y	
Haplopappus crispus	Pine Valley goldenbush	?		?		
Hedysarum occidentale var. *canone*	Canyon sweetvetch		Y			
Heterotheca jonesii	Jones goldenaster	Y				
Hymenoxys depressa	Low hymenoxys	Y	Y	Y		Y
Hymenoxys lapidicola	Rock hymenoxys					Y
Iris pariensis	Paria iris	?				
Jamesia americana var. *zionis*	Cliff jamesia	Y				
Jamesia tetrapetala	Foru-petal jamesia			Y		
Lepidium montanum var. *neeseae*	Neeses' peppergrass	Y				
Lepidium montanum var. *stellae*	Stellas' peppergrass	Y				

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Lepidium ostleri	Ostler peppergrass	Y				
Lesquerella garretti	Garrett bladderpod				?	
Lesquerella tumulosa	Kodachrome bladderpod	Y				
Lomatium latilobum	Canyonlands lomatium		Y			
Lygodesmia doloresensis	Dolores River skeletonplant		Y			
Lygodesmia entrada	Entrada skeletonplant		Y	Y		
Mentzelia argillosa	Southwestern stickleaf			Y		
Mentzelia multicaulis var. *librina*	Book Cliffs blazing star		Y			
Mentzelia shultziorum	Shultz stickleaf		Y			
Musineon lineare	Rydberg musineon				?	
Oenothera flava var. *acutissima*	Yellow evening-primrose					Y
Oreoxis trotteri	Trotter oreoxis		Y			
Ostrya knowltonii	Western hophornbeam		Y			
Pediocactus despainii	Despain footcactus		Y	Y		
Pediocactus sileri	Siler pincushion cactus	Y				
Pediocactus winkleri	Winkler footcactus		Y	Y		
Pediomelum epipsilum	Kane breadroot	Y				
Pediomelum pariense	Paria breadroot	Y				
Penstemon acaulis var. *acaulis*	Stemless beardtongue					Y

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Penstemon ammophilus	Canaan mountain beardtongue	Y				
Penstemon angustifolius var. *dulcis*	Neese narrowleaf penstemon			Y		
Penstemon atwoodii	Atwood's beardtongue	Y				
Penstemon concinnus	Elegant penstemon	Y		Y		
Penstemon flowersii	Flowers' beardtongue					Y
Penstemon gibbensii	Gibbens Beardtongue					Y
Penstemon goodrichii	Goodrich penstemon					Y
Penstemon grahamii	Graham beardtongue					Y
Penstemon idahoensis	Idaho penstemon				Y	
Penstemon nanus	Low beardtongue	Y		Y		
Penstemon pinorum	Pinyon penstemon	Y				
Penstemon scariosus var. *albifluvis*	White river penstemon					Y
Penstemon tidestromii	Tidestrom beardtongue			Y		
Penstemon wardii	Ward beardtongue			Y		
Perityle specuicola	Alcove rock-daisy		Y			
Phacelia howelliana	Howell scorpion weed		Y			
Phacelia indecora	Drab phacelia		?			
Phacelia utahensis	Utah phacelia			Y		
Potentilla cottamii	Cottam cinquefoil				Y	
Primula domensis	House Range primrose			Y		
Proatriplex pleiantha	Four-corners orach		?			

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Psorothamnus polydenius var. *jonesii*	Jones indigo-bush		Y			
Schoencrambe argillacea	Clay thelypody					Y
Schoencrambe barnebyi	Barneby thelypody		Y	Y		
Schoencrambe suffrutescens	Shrubby reed-mustard					Y
Sclerocactus pubispinus var. *pubisipinus*	Great Basin fishhook cactus	Y		Y	Y	
Sclerocactus glaucus	Uinta basin hookless cactus					Y
Sclerocactus wrightiae	Wright fishhook cactus		Y	Y		
Selaginella utahensis	Utah spike-moss	Y				
Silene petersonii	Maguire campion	Y				
Sphaeralcea caespitosa	Jones globemallow	Y		Y		
Sphaeralcea psoraloides	Psoralea globemallow		Y	Y		
Sphaeromeria ruthiae	Zion tansy	Y				
Spiranthes diluvialis	Ute lady's tresses	Y			?	Y
Talinum thompsonii	Thompsons' pink flame-flower		Y			
Thelesperma subnudum var. *alpinum*	Bicknell thelesperma			Y		
Townsendia aprica	Last chance townsendia		Y	Y		
Townsendia jonesii var. *lutea*	Sevier townsendia			Y		

Scientific Name	Common Name	Distribution By District				
		CDRCTY	MOAB	RCHFLD	SLTLK	VRNL
Trifolium andersonii var. *friscanum*	Frisco clover	Y		Y		
Xylorhiza cronquistii	Cronquist woodyaster	Y				

Code: Y=occurs on BLM land, ?= might occur on BLM land
CDRCTY=Cedar City RCHFLD=Richfield, SLTLK=Salt Lake,
VRNL=Vernal

TES Plant Species of the Cedar City District

Scientific Name	Common Name	Resource Area			
		Escalante	Kanab	Dixie	Beaver River
Arctomecon humilis	Dwarf bearclaw poppy			Y	
Asclepias welshii	Welsh's milkweed		Y		
Asplenium adiantum-nigrum	Black spleenwort		?	?	
Astragalus ampullarius	Gumbo milkvetch		Y	Y	
Astragalus eremiticus var. *ampullarioides*	Shem milkvetch			?	
Astragalus holmgreniorum	Holmgren milkvetch			Y	
Astragalus monumentalis	Monument milkvetch	Y	Y		
Astragalus oophorus var. *lonchocalyx*	Pink egg milkvetch				Y
Camissonia atwoodii	Atwoods' camissonia		Y		
Camissonia exilis	Slender cammissonia		Y		
Carex curatorum	Canyonlands sedge		Y		
Cirsium virginensis	Virgin thistle			Y	
Cryptantha cinerea var. *arenicola*	Sand-dwelling cryptanth	Y	Y	Y	
Cryptantha compacta	Mound cryptanth			Y	Y
Cryptantha ochroleuca	Yellow-white catseye		Y		
Cycladenia humilis var. *jonesii*	Jones cycladenia	Y			
Cymopterus acaulis var. *higginsii*	Higgins biscuitroot		Y		

Scientific Name	Common Name	Resource Area			
		Escalante	Kanab	Dixie	Beaver River
Dalea flavescens var. *epica*	Hole-in-the-rock prairie clover	Y			
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus	?			
Epilobium nevadense	Nevada willowherb			Y	
Erigeron canaani	Canaan daisy			Y	
Erigeron sionis	Zion daisy		Y	Y	
Eriogonum batemanii var. *eremicum*	Hermit buckwheat				Y
Eriogonum soredium	Frisco buckwheat				Y
Habenaria zothecina	Alcove bog-orchid	Y	Y		
Haplopappus crispus	Pine Valley goldenbush			?	
Heterotheca jonesii	Jones goldenaster		Y	Y	
Hymenoxys depressa	Low hymenoxys			Y	
Iris pariensis	Paria iris		?		
Jamesia americana var. *zionis*	Cliff jamesia			Y	
Lepidium montanum var. *neeseae*	Neeses' peppergrass		Y		
Lepidium montanum var. *stellae*	Stellas' peppergrass		Y		
Lepidium ostleri	Ostler peppergrass				Y
Lesquerella tumulosa	Kodachrome bladderpod		Y		
Pediocactus sileri	Siler pincushion cactus			Y	

TES Plant Species of the Cedar City District

Scientific Name	Common Name	Resource Area			
		Escalante	Kanab	Dixie	Beaver River
Arctomecon humilis	Dwarf bearclaw poppy			Y	
Asclepias welshii	Welsh's milkweed		Y		
Asplenium adiantum-nigrum	Black spleenwort		?	?	
Astragalus ampullarius	Gumbo milkvetch		Y	Y	
Astragalus eremiticus var. *ampullarioides*	Shem milkvetch			?	
Astragalus holmgreniorum	Holmgren milkvetch			Y	
Astragalus monumentalis	Monument milkvetch	Y	Y		
Astragalus oophorus var. *lonchocalyx*	Pink egg milkvetch				Y
Camissonia atwoodii	Atwoods' camissonia		Y		
Camissonia exilis	Slender cammissonia		Y		
Carex curatorum	Canyonlands sedge		Y		
Cirsium virginensis	Virgin thistle			Y	
Cryptantha cinerea var. *arenicola*	Sand-dwelling cryptanth	Y	Y	Y	
Cryptantha compacta	Mound cryptanth			Y	Y
Cryptantha ochroleuca	Yellow-white catseye		Y		
Cycladenia humilis var. *jonesii*	Jones cycladenia	Y			
Cymopterus acaulis var. *higginsii*	Higgins biscuitroot		Y		

Scientific Name	Common Name	Resource Area			
		Escalante	Kanab	Dixie	Beaver River
Dalea flavescens var. *epica*	Hole-in-the-rock prairie clover	Y			
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus	?			
Epilobium nevadense	Nevada willowherb			Y	
Erigeron canaani	Canaan daisy			Y	
Erigeron sionis	Zion daisy		Y	Y	
Eriogonum batemanii var. *eremicum*	Hermit buckwheat				Y
Eriogonum soredium	Frisco buckwheat				Y
Habenaria zothecina	Alcove bog-orchid	Y	Y		
Haplopappus crispus	Pine Valley goldenbush			?	
Heterotheca jonesii	Jones goldenaster		Y	Y	
Hymenoxys depressa	Low hymenoxys			Y	
Iris pariensis	Paria iris		?		
Jamesia americana var. *zionis*	Cliff jamesia			Y	
Lepidium montanum var. *neeseae*	Neeses' peppergrass		Y		
Lepidium montanum var. *stellae*	Stellas' peppergrass		Y		
Lepidium ostleri	Ostler peppergrass				Y
Lesquerella tumulosa	Kodachrome bladderpod		Y		
Pediocactus sileri	Siler pincushion cactus			Y	

Scientific Name	Common Name	Resource Area			
		Escalante	Kanab	Dixie	Beaver River
Pediomelum epipsilum	Kane breadroot		Y		
Pediomelum pariense	Paria breadroot		Y		
Penstemon ammophilus	Canaan mountain beardtongue		Y	Y	
Penstemon atwoodii	Atwood's beardtongue	Y	Y		
Penstemon concinnus	Elegant penstemon				Y
Penstemon nanus	Low beardtongue				Y
Penstemon pinorum	Pinyon penstemon				Y
Sclerocactus pubispinus var. *pubisipinus*	Great Basin fishhook cactus				Y
Selaginella utahensis	Utah spike-moss		Y	Y	
Silene petersonii	Maguire campion		Y		Y
Sphaeralcea caespitosa	Jones globemallow				Y
Sphaeromeria ruthiae	Zion tansy			Y	
Spiranthes diluvialis	Ute lady's tresses	Y			
Trifolium andersonii var. *friscanum*	Frisco clover				Y
Xylorhiza cronquistii	Cronquist woodyaster		Y		

Code: Y=occurs on resource area, ?=might occur on resource area

TES Plant Species of the Moab District

Scientific Name	Common Name	Resource Area			
		Price	San Rafael	Grand	San Juan
Asclepias cutleri	Cutler milkweed			Y	Y
Astragalus consobrinus	Bicknell milkvetch	Y	Y		
Astragalus cronquistii	Cronquist milkvetch				Y
Astragalus iselyi	Isely milkvetch			Y	Y
Astragalus monumentalis	Monument milkvetch				Y
Astragalus preussii var. *cutleri*	Copper Canyon milkvetch				?
Astragalus sabulosus	Cisco milkvetch			Y	
Astragalus subcinereus var. *basalticus*	Basalt milkvetch		Y		
Astragalus wetherillii	Wetherill's milkvetch			Y	
Carex curatorum	Canyonlands sedge				Y
Cryptantha creutzfeldtii	Creutzfeldt-flower	Y	Y		
Cycladenia humilis var. *jonesii*	Jones cycladenia		Y	Y	
Cymopterus beckii	Pinnate spring-parsley				Y
Dalea flavescens var. *epica*	Hole-in-the-rock prairie clover				Y
Echinocereus triglochidiatus var. *inermis*	Spineless hedgehog cactus		Y	Y	
Erigeron kachinensis	Kachina daisy				Y
Erigeron maguirei var. *maguirei*	Maguires' daisy		Y		

Scientific Name	Common Name	Resource Area			
		Price	San Rafael	Grand	San Juan
Eriogonum corymbosum var. *smithii*	Smith wild buckwheat		Y		
Gilia tenuis	Mussentuchit gilia		Y		
Habenaria zothecina	Alcove bog-orchid		Y	Y	
Hedysarum occidentale var. *canone*	Canyon sweetvetch	Y	Y		
Hymenoxys depressa	Low hymenoxys	Y	Y		
Lomatium latilobum	Canyonlands lomatium			Y	Y
Lygodesmia doloresensis	Dolores River skeletonplant			Y	
Lygodesmia entrada	Entrada skeletonplant		Y	Y	
Mentzelia multicaulis var. *librina*	Book Cliffs blazing star	Y	Y		
Mentzelia shultziorum	Shultz stickleaf			Y	
Oreoxis trotteri	Trotter oreoxis			Y	
Ostrya knowltonii	Western hophornbeam			Y	
Pediocactus despainii	Despain footcactus		Y		
Pediocactus winkleri	Winkler footcactus		Y		
Perityle specuicola	Alcove rock-daisy			Y	Y
Phacelia indecora	Drab Phacelia				Y
Proatriplex pleiantha	Four-corners orach				?
Psorothamnus polydenius var. *jonesii*	Jones indigo-bush	Y	Y		
Schoencrambe barnebyi	Barneby thelypody	Y	Y		

Scientific Name	Common Name	Resource Area			
		Price	San Rafael	Grand	San Juan
Sclerocactus wrightiae	Wright fishhook cactus		Y		
Sphaeralcea psoraloides	Psoralea globemallow	Y	Y		
Talinum thompsonii	Thompsons' pink flame-flower	Y	Y		
Townsendia aprica	Last chance - townsendia		Y		

Code: Y=occurs on resource area, ?=might occur on resource area,
PRICE=Price River

TES Plant Species of the Richfield District

Scientific Name	Common Name	Resource Area			
		Henry Mtn	Sevier	Wrm Spr	House Rng
Astragalus barnebyi	Barneby milkvetch	Y			
Astragalus consobrinus	Bicknell milkvetch	Y	Y		
Astragalus henrimontanensis	Dana milkvetch	Y			
Astragalus monumentalis	Monument milkvetch	Y			
Astragalus serpens	Plateau milkvetch	Y	Y		
Astragalus subcinereus var. *basalticus*	Basalt milkvetch		Y		
Astragalus unicalis	Current milkvetch			Y	Y
Atriplex canescens var. *gigantea*	Giant four-wing saltbush				Y
Cryptantha compacta	Mound cryptanth			Y	Y
Cuscuta warneri	Warner's dodder			?	
Cycladenia humilis var. *jonesii*	Jones cycladenia	?			
Cymopterus beckii	Pinnate spring-parsley	?			
Cymopterus coulteri	Coulter biscuitroot		Y		Y
Dalea flavescens var. *epica*	Hole-in-the-rock prairie clover	Y			
Draba kassii	Kass rockcress				Y
Epilobium nevadense	Nevada willowherb			Y	Y
Eriogonum batemanii var. *eremicum*	Hermit buckwheat			Y	Y

Scientific Name	Common Name	Resource Area			
		Henry Mtn	Sevier	Wrm Spr	House Rng
Eriogonum batemanii var. *ostlundii*	Elsinore buckwheat		Y		
Eriogonum corymbosum var. *cronquistii*	Cronquist wild buckwheat	Y			
Eriogonum corymbosum var. *smithii*	Smith wild buckwheat	Y			
Eriogonum nummulare var. *ammophilum*	Ibex buckwheat			Y	Y
Gilia caespitosa	Rabbit Valley gilia	Y			
Gilia tenuis	Mussentuchit gilia	Y			
Hackelia ibapensis	Deep Creek stickseed				Y
Haplopappus crispus	Pine Valley goldenbush			?	?
Hymenoxys depressa	Low hymeonxys	Y	Y		
Jamesia tetrapetala	Four-petal jamesia				Y
Lygodesmia entrada	Entrada skeletonplant	Y			
Mentzelia argillosa	Southwestern stickleaf	Y	Y		
Pediocactus despainii	Despain footcactus	Y	Y		
Pediocactus winkleri	Winkler footcactus	Y	Y		
Penstemon angustifolius var. *dulcis*	Neese narrowleaf penstemon			Y	Y
Penstemon concinnus	Elegant penstemon			Y	
Penstemon nanus	Low beardtongue			Y	Y
Penstemon tidestromii	Tidestrom beardtongue	Y	Y		
Penstemon wardii	Ward beardtongue	Y			

Scientific Name	Common Name	Resource Area			
		Henry Mtn	Sevier	Wrm Spr	House Rng
Phacelia utahensis	Utah phacelia	Y			
Primula domensis	House Range primrose		Y	Y	
Schoencrambe barnebyi	Barneby thelypody	Y			
Sclerocactus pubispinus var. *pubisipinus*	Great Basin fishhook cactus			Y	Y
Sclerocactus wrightiae	Wright fishhook cactus	Y	Y		
Sphaeralcea caespitosa	Jones globemallow			Y	Y
Sphaeralcea psoraloides	Psoralea globemallow	Y			
Thelesperma subnudum var. *alpinum*	Bicknell thelesperma	Y			
Townsendia aprica	Last chance townsendia	Y	Y		
Townsendia jonesii var. *lutea*	Sevier townsendia		Y		
Trifolium andersonii var. *friscanum*	Frisco clover			Y	Y

Code: Y=occurs on resource area, ?=might occur on resource area, HENRY MTN=Henry Mountain, SEVIER=Sevier River, WRM SPR=Warm Springs, HOUSE RNG=House Range

TES Plant Species of the Salt Lake District

Scientific Name	Common Name	Resource Area	
		Pony Express	Bear River
Arabis falcatoria	Grouse creek rockcress		Y
Astragalus anserinus	Goose creek milkvetch		Y
Cryptantha caespitosa	Tufted cryptanth		Y
Cryptantha compacta	Mound cryptanth	Y	
Cymopterus coulteri	Coulter biscuitroot	Y	
Draba kassii	Kass rockcress	Y	
Erigeron cronquistii	Cronquist daisy		Y
Hackelia ibapensis	Deep Creek stickseed	Y	
Lesquerella garrettii	Garrett bladderpod	?	
Musineon lineare	Rydberg musineon		?
Penstemon idahoensis	Idaho penstemon		Y
Potentilla cottamii	Cottam cinquefoil		Y
Sclerocactus pubispinus var. *pubisipinus*	Great Basin fishhook cactus	Y	Y
Spiranthes diluvialis	Ute lady's tresses	?	

Code: Y=occurs on resource area, ?=might occur on resource area

TES Plant Species of the Vernal District

Scientific Name	Common Name	Resource Area	
		Book Cliffs	Diamond Mtn
Aquilegia barnebyi	Shale columbine	Y	Y
Arabis vivariensis	Park rock cress	Y	?
Astragalus equisolensis	Horseshoe milkvetch	Y	Y
Astragalus hamiltonii	Hamilton milkvetch	Y	Y
Astragalus lutosus	Dragon milkvetch	Y	
Cirsium ownbeyi	Ownbey thistle		Y
Cryptantha caespitosa	Tufted cryptanth	Y	Y
Draba pectiniphila	Woods draba		Y
Festuca dasyclada	Sedge fescue	Y	Y
Hymenoxys depressa	Low hymenoxys	Y	Y
Hymenoxys lapidicola	Rock hymenoxys	Y	
Oenothera flava var. *acutissima*	Yellow evening-primrose		Y
Penstemon acaulis var. *acaulis*	Stemless beardtongue		Y
Penstemon flowersii	Flowers' beardtongue		Y
Penstemon gibbensii	Gibbens beardtongue		Y
Penstemon goodrichii	Goodrich penstemon		Y
Penstemon grahamii	Graham beardtongue	Y	
Penstemon scariosus var. *albifluvis*	White river penstemon	Y	
Schoencrambe argillacea	Clay thelypody	Y	Y
Schoencrambe suffrutescens	Shrubby reed-mustard	Y	Y
Sclerocactus glaucus	Uinta basin hookless cactus	Y	Y

Scientific Name	Common Name	Resource Area	
		Book Cliffs	Diamond Mtn
Spiranthes diluvialis	Ute lady's tresses		Y

Code: Y=occurs on resource area, ?=might occur on resource area

NATIONAL PARK SERVICE UNITS IN UTAH
Threatened, Endangered, and Sensitive Plant List

Scientific Name	Distribution By National Park Unit									
	ARCH	BRCA	CANY	CEBR	CARE	DINO	GLCA	NABR	TICA	ZION
Arabis vivariensis Park rock cress						?				
Asclepias cutleri Cutler milkweed							?			
Asplenium adiantum-nigrum Black spleenwort										Y
Aster kingi var. *kingiii* King woody aster									Y	
Astragalus consobrinus Bicknell milkvetch					Y					
Astragalus hamiltonii Hamilton milkvetch						Y				
Astragalus limnocharis var. *limnocharis* Navajo Lake milkvetch		Y		Y						
Astragalus monumentalis Monument milkvetch			?				Y			
Astragalus preusii var. *cutleri* Copper Canyon milkvetch							Y			
Astragalus sabulosus Cisco milkvetch			?							
Astragalus subcinereus var. *basalticus* Basalt milkvetch		?								
Camissonia atwoodii Atwood's camissonia							Y			
Carex curatorum Canyonlands sedge							Y			

Scientific Name	Distribution By National Park Unit									
	ARCH	BRCA	CANY	CEBR	CARE	DINO	GLCA	NABR	TICA	ZION
Carex specuicola *Navajo sedge*							Y			
Castilleja parvula var. *revealii* Reveal paintbrush				Y		?				
Cirsium ownbeyi Ownbey thistle						Y				
Cryptantha compacta Mound cryptanth		Y								
Cryptantha ochroleuca Yellow-white catseye		Y								
Cycladenia humilis var. *jonesii* Jones cycladenia					Y		Y			
Cymopterus acaulis var. *higginsii* Higgins biscuitroot							Y			
Cymopterus beckii Pinnate spring-parsley			Y		Y					
Cymopterus minimus Cedar Breaks biscuitroot				Y						
Dalea flavescens var. *epica* Hole-in-the-rock prairie clover							Y			
Draba pectinipila Woods draba						Y				
Epilobium nevadense Nevada willowherb										Y
Erigeron canaanii Canaan daisy										Y

Scientific Name	Distribution By National Park Unit									
	ARCH	BRCA	CANY	CEBR	CARE	DINO	GLCA	NABR	TICA	ZION
Erigeron kachinensis Kachina daisy							?	Y		
Erigeron maguirei var. *harrisonii* Harrisons' daisy					Y					
Erigeron zionis Zion daisy										Y
Erigeron zothecinus Alcove daisy							Y			
Eriogonum aretioides Widstoe buckwheat		Y								
Eriogonum corymbosum var. *smithii* Smith wild buckwheat			?							
Gilia caespitosa Rabbit Valley gilia					Y					
Gilia tenuis Mussentuchit gilia					?					
Habenaria zothecina Alcove bog-orchid			?			Y	Y			
Haplopappus zionis Cedar Breaks goldenbush		Y								Y
Heterotheca jonesii Jones goldenaster		Y		Y						Y
Hymenoxys depressa Low hymenoxys		Y			Y					
Hymenoxys lapidicola Rock hymenoxys						Y				
Iris pariensis Paria iris							?			

Scientific Name	Distribution By National Park Unit									
	ARCH	BRCA	CANY	CEBR	CARE	DINO	GLCA	NABR	TICA	ZION
Jamesia americana var. *zionis* Cliff jamesia										Y
Lesquerella garrettii Garrett bladderpod									?	
Lomatium latilobum Canyonlands lomatium	Y		?					Y		
Lygodesmia entrada Entrada skeletonplant	Y		?							
Oenothera flava var. *acutissima* Yellow evening-primrose						Y				
Oreoxis trotteri Trotter oreoxis	?		?					Y		
Ostrya knowltonii Western hophornbeam			Y		Y		Y			
Pediocactus despainii Despain footcactus					Y					
Pediocactus winkleri Winkler footcactus					Y					
Pediomelum pariense Paria breadroot		Y								Y
Penstemon ammophilus Canaan Mountain beardtongue										Y
Penstemon atwoodii Atwood's beardtongue							?			
Penstemon bracteatus Red Canyon beardtongue				Y						
Penstemon gibbensii Gibben's beardtongue						Y				

Scientific Name	Distribution By National Park Unit									
	ARCH	BRCA	CANY	CEBR	CARE	DINO	GLCA	NABR	TICA	ZION
Perityle specuicola Alcove rock-daisy			Y		?		?		Y	
Phacelia howelliana Howell scorpion weed	Y		Y				?			
Psorothamnus thompsoniae var. *whitingii* Thompson's indigobush							Y			
Schoencrambe barnebyi Barneby thelypody					Y					
Sclerocactus wrightiae Wright fishhook cactus					Y					
Selaginella utahensis Utah spike-moss										Y
Silene petersonii Maguire campion		Y		Y						
Sphaeromeria ruthiae Zion tansy										Y
Spiranthes diluvialis Ute lady's tresses					Y	Y	?			
Thelesperma subnudum var. *alpinum* Bicknell thelesperma					Y					
Townsendia aprica Last chance townsendia					Y					
Viola purpurea var. *charlestonensis* Charleston Mountain violet										Y

Code: Y=occurs in National Park Unit, ?=might occur in National Park Unit, ARCH=Arches National Park, BRCA=Bryce Canyon National Park, CANY=Canyonlands National Park, CEBR=Cedar Breaks

National Monument, CARE=Capitol Reef National Park, DINO=Dinosaur National Monument, GLCA=Glen Canyon National Recreation Area, NABR=Natural Bridges National Monument, TICA=Timpanogos Cave National Monument, ZION=Zion National Park

UTAH INDIAN TRIBES
Threatened, Endangered, And Sensitive Plant List

Scientific Name	Common Name	Distribution by Tribe			
		Goshute	Navajo	Paiute	Ute
Asclepias cutleri	Cutler milkweed		Y		
Astragalus ampullarius	Gumbo milkvetch			Y	
Astragalus cronquistii	Cronquist milkvetch		Y		
Astragalus eremiticus var. *ampullarioides*	Shem milkvetch				Y
Astragalus hamiltonii	Hamilton milkvetch		Y		
Astragalus monumentalis	Monument milkvetch		Y		
Astragalus preussii var. *cutleri*	Copper Canyon milkvetch		Y		
Carex curatorum	Canyonlands sedge		?		
Carex specuicola	Navajo sedge		Y		
Erigeron untermannii	Untermann daisy				Y
Hackelia ibapensis	Deep Creek stickseed	?			
Lepidium barnebyanum	Barneby peppergrass				Y
Penstemon flowersii	Flowers penstemon				Y
Penstemon goodrichii	Goodrich penstemon				Y
Penstemon grahamii	Graham beardtongue				?
Penstemon navajoa	Navajo Mountain penstemon		Y		
Phacelia howelliana	Howell scorpion weed		Y		
Proatriplex pleiantha	Four-corners orach		Y		
Psorothamnus thompsoniae var. *whitingii*	Thompson's indigobush		Y		

Scientific Name	Common Name	Distribution by Tribe			
		Goshute	Navajo	Paiute	Ute
Schoencrambe argillacea	Clay thelypody				?
Schoencrambe suffrutescens	Shrubby reed-mustard				Y
Sclerocactus glaucus	Uinta basin hookless cactus				Y

Code: ?=might occur on tribal lands, Y=occurs on tribal lands

TES Plant Species of the Navajo Nation

Scientific Name	Common Name	Chapter Names									
		TCNPS	RDMSA	DNHTS	MEXWT	KAYEN	ANETH	OLJAT	NAVAJ	SHONT	INSCR
Asclepias cutleri	Cutler milkweed	Y	Y	Y	Y	Y	Y				
Astragalus cronquistii	Cronquist milkvetch						Y				
Astraglus monumentalis	Monument milkvetch			Y		Y		Y			
Astraglus preussii var. *cutleri*	Copper Canyon milkvetch							Y			
Carex curatorum	Canyonlands sedge							?	?	?	
Carex specuicola	Navajo sedge			?	Y			?	?	Y	Y
Phacelia howelliana	Howell scorpion weed					?		Y	?	?	
Penstemon navajoa	Navajo Mountain-penstemon								Y		
Proatriplex pleiantha	Four-corners orach						Y				
Psorothamnus thompsoniae var. *whitingii*	Thompson's indigobush							Y	Y	?	

Code: ?=might occur on the chapter, Y=occurs on the chapter, TCNPS=Teec Nos Pos, RDMSA=Red Mesa, DNHTS=Dennehotso, MEXWT=Mexican Water, KAYEN=Kayenta, OLJAT=Oljato, NAVAJ=Navajo Mountain, SHONT=Shonto, INSCR=Inscription House

TES Plant Species of the Paiute Indian Tribe of Utah

Scientific Name	Common Name	Shivwit Band
Astragalus ampullarius	Gumbo milkvetch	?
Astragalus eremiticus var. *ampullarioides*	Shem milkvetch	Y

Code: Y=occurs on the band

The Paiute Indian Tribe of Utah is divided into 5 bands in southern Utah. Shivwit is one of the 5 bands.

TES Plant Species of the Ute Indian Tribe

Scientific Name	Common Name	Political Boundaries Hill Cr Ext	North Unit
Astragalus hamiltonii	Hamilton milkvetch		Y
Erigeron untermannii	Untermann daisy		Y
Lepidium barnebyanum	Barneby peppergrass		Y
Penstemon flowersii	Flowers penstemon		Y
Penstemon goodrichii	Goodrich penstemon		Y
Penstemon grahamii	Graham beardtongue	?	
Schoencrambe argillacea	Clay thelypody	Y	
Schoencrambe suffrutescens	Shrubby reed-mustard	Y	
Sclerocactus glaucus	Uinta basin hookless cactus	Y	

Code: ?=might occur in the political boundaries, Y=occurs in the political boundaries

TES Plant Species of the Goshute Indian Tribe

Scientific Name	Common Name	Goshute
Hackelia ibapensis	Deep Creek stickseed	?

Code: ?=might occur

SPECIES BY HABITAT TYPE

Alpine

Aster kingii var. *kingii*
Castilleja parvula var. *parvula*
Erigeron mancus

Alpine Tundra

Draba sobolifera
Lesquerella garrettii
Papaver radicatum var. *pygmaeum*
Parrya rydbergii
Penstemon uintahensis

Aquatic

Najas caespitosa

Aspen

Arabis falcatoria
Astragalus serpens
Haplopappus crispus
Hymenoxys helenioides
Penstemon navajoa
Primula maguirei
Silene petersonii

Bogs-seeps

Astragalus limnocharis var. *limnocharis*
Carex curatorum
Carex leptalea
Cirsium virginensis
Erigeron kachinensis
Erigeron sionis
Erigeron zothecinus
Potentilla palustris
Spiranthes diluvialis
Trautvetteria caroliniensis

Bristlecone Pine

Astragalus limnocharis var. *tabulaeus*
Castilleja parvula var. *revealii*
Cryptantha ochroleuca
Cymopterus minimus

Eriogonum aretioides
Penstemon bracteatus
Silene petersonii
Sphaeromeria capitata
Thelesperma subnudum var. *alpinum*

Cultivated Fields

Cuscuta warneri

Desert Shrub

Aquilegia barnebyi
Arabis falcatoria
Arabis vivariensis
Arctomecon humilis
Asclepias cutleri
Astragalus barnebyi
Astragalus equisolensis
Astragalus eremiticus var. *ampullarioides*
Astragalus hamiltonii
Astragalus holmgreniorum
Astragalus iselyi
Astragalus lutosus
Astragalus monumentalis
Astragalus oophorus var. *lonchocalyx*
Astragalus preusii var. *cutleri*
Astragalus sabulosus
Camissonia exilis
Cryptantha compacta
Cycladenia humilis var. *jonesii*
Cymopterus acaulis var. *higginsii*
Cymopterus coulteri
Dalea flavescens var. *epica*
Eriogonum batemanii var. *ostlundii*
Eriogonum nummulare var. *ammophilum*
Hymenoxys depressa
Iris pariensis
Lepidium ostleri
Lomatium latilobum
Lygodesmia entrada
Oreoxis trotteri
Pediocactus sileri
Penstemon angustifolius var. *dulcis*
Penstemon gibbensii
Penstemon grahamii
Penstemon nanus
Penstemon scariosus var. *albifluvis*
Penstemon tidestromii
Penstemon wardii

Phacelia howelliana
Phacelia indecora
Psorothamnus thompsoniae var. *whitingii*
Schoencrambe argillacea
Schoencrambe barnebyi
Schoencrambe suffrutescens
Sclerocactus glaucus
Sphaeralcea caespitosa

Douglas Fir

Aquilegia barnebyi
Astraglaus limnocharis var. *tabulaeus*
Draba maguirei
Erigeron maguirei var. *maguirei*
Eriogonum aretioides
Hackelia ibapensis
Heterotheca jonesii
Penstemon navajoa
Primula domensis

Ephedra

Lygodesmia deloresensis
Mentzelia shultziorum
Sphaeralcea psoraloides

Grass-forb

Astragalus limnocharis var. *limnocharis*
Astragalus montii
Castilleja aquariensis
Cryptantha caespitosa
Erigeron carringtonae
Erigeron mancus
Eriogonum corymbosum var. *smithii*
Oenothera flava var. *acutissima*
Thelesperma pubescens

Hanging Gardens

Carex specuicola
Erigeron kachinensis
Erigeron sionis
Erigeron zothecinus
Habenaria zothecina
Jamesia americana var. *zionis*
Ostrya knowltonii
Perityle specuicola

Juniper

Asclepias welshii
Astragalus anserinus
Cirsium ownbeyi
Cycladenia humilis var. *jonesii*
Cymopterus coulteri
Erigeron maguirei var. *harrisonii*
Erigeron maguirei var. *maguirei*
Eriogonum batemanii var. *eremicum*
Eriogonum batemanii var. *ostlundii*
Eriogonum soredium
Festuca dasyclada
Gilia spicata
Lepidium montanum var. *stellae*
Lesquerella tumulsa
Lygodesmia entrada
Oreoxis trotteri
Penstemon angustifolius var. *dulcis*
Penstemon goodrichii
Penstemon idahoensis
Schoencrambe suffrutescens
Sclerocactus wrightiae
Townsendia jonesii var. *lutea*

Limber Pine

Cryptantha caespitosa
Penstemon bracteatus

Lodgepole Pine

Cypripedium fasciculatum

Manzanita

Haplopappus crispus
Heterotheca jonesii
Hymenoxys lapidicola
Penstemon ammophilum
Penstemon bracteatus

Mountain Brush

Arabis falcatoria
Asplenium adiantum-nigrum
Aster kingii var. *barnebyana*
Astragalus wetherillii
Cryptantha caespitosa
Cryptantha cinera var. *arenicola*
Cymopterus beckii

Draba kassii
Draba maguirei
Draba pectiniphila
Erigeron maguirei var. *maguirei*
Festuca dasyclada
Gutierrezia petradoria
Hackelia ibapensis
Hymenoxys helenioides
Lepidium montanum var. *neeseae*
Phacelia argillacea
Primula domensis
Selaginella utahensis
Thelesperma subnudum var. *alpinum*

Mountain Mahogany

Aster kingii var. *barnebyana*
Gutierrezia petradoria
Penstemon goodrichii
Schoencrambe suffrutescens

Pinyon-juniper

Aquilegia barnebyi
Arabis falcatoria
Arabis vivariensis
Asclepias cutleri
Aster kingii var. *barnebyana*
Astragalus ampullarius
Astragalus barnebyi
Astragalus consobrinus
Astragalus desereticus
Astragalus equisolensis
Astragalus hamiltonii
Astragalus henrimontanensis
Astragalus iselyi
Astragalus lutosus
Astragalus monumentalis
Astragalus oophorus var. *lonchocalyx*
Astragalus serpens
Astragalus subcinereus var. *basalticus*
Astragalus wetherillii
Camissonia exilis
Cryptantha caespitosa
Cryptantha cinerea var. *arenicola*
Cryptantha ochroleuca
Cymopterus beckii
Draba kassii
Draba pectiniphila
Echinocereus triglochidiatus var. *inermis*

Epilobium nevadense
Erigeron maguirei var. *harrisonii*
Erigeron maguirei var. *maguirei*
Erigeron untermannii
Eriogonum batemanii var. *ostlundii*
Eriogonum corybosum var. *cronquistii*
Gilia caespitosa
Gilia tenuis
Hedysarum occidentale var. *canone*
Hymenoxys depressa
Hymenoxys lapidicola
Lepidium barnebyanum
Lepidium ostleri
Lomatium latilobum
Lupinus crassus
Mentzelia argillosa
Mentzelia multicaulis var. *librina*
Pediocactus despainii
Pediomelum epipsilum
Pediomelum pariense
Penstemon acaulis var. *acaulis*
Penstemon ammophilus
Penstemon atwoodii
Penstemon bracteatus
Penstemon concinnus
Penstemon grahamii
Penstemon nanus
Penstemon parvus
Penstemon pinorum
Penstemon scariosus var. *albifluvis*
Penstemon tidestromii
Penstemon wardii
Phacelia argillacea
Sclerocactus pubispinus var. *pubispinus*
Selaginella utahensis
Sphaeralcea caespitosa
Spiranthes diluvialis
Talinum thompsonii
Thelesperma subnudum var. *alpinum*
Townsendia aprica
Trifolium andersonii var. *friscanum*
Xylorhiza cronquistii

Ponderosa Pine

Arabis falcatoria
Asclepias welshii
Asplenium adiantum-nigrum
Astragalus henrimontanensis
Castilleja parvula var. *revealii*

Cryptantha cinera var. *arenicola*
Cryptantha ochroleuca
Cymopterus beckii
Cymopterus minimus
Draba pectiniphila
Erigeron canaani
Erigeron kachinensis
Erigeron maguirei var. *maguirei*
Eriogonum aretioides
Haplopappus crispus
Haplopappus zionis
Heterotheca jonesii
Hymenoxys lapidicola
Lepidium montanum var. *neeseae*
Oenothera flava var. *acutissma*
Pediomelum pariense
Penstemon ammophilus
Penstemon atwoodii
Penstemon bracteatus
Penstemon navajoa
Selaginella utahensis
Silene petersonii
Sphaeromeria ruthiae
Talinum thompsonii
Viola purpurea var. *charlestonensis*

Riparian

Cirsium ownbeyi
Spiranthes diluvialis

Rocks, Crevices And Ledges

Asplenium adiantum-nigrum
Erigeron cronquistii
Eriogonum brevicaule var. *loganum*
Jamesia tetrapetala
Musineon lineare
Podistera eastwoodiae
Potentilla cottami
Primula domensis
Primula maguirei

Rocky Mountain Juniper

Eriogonum aretioides
Silene petersonii

Sagebrush

Arabis falcatoria
Asclepias welshii
Astragalus ampullarius
Astragalus anserinus
Astragalus consobrinus
Astragalus desereticus
Astragalus eqisolensis
Astragalus henrimontanensis
Astragalus oophorus var. *lonchocalyx*
Astragalus perianus
Astragalus serpens
Castilleja aquariensis
Cirsium ownbeyi
Cryptantha cinera var. *arenicola*
Draba pectiniphila
Eriogonum batemanii var. *ostlundii*
Eriogonum brevicaule var. *loganum*
Eriogonum corymbosum var. *smithii*
Eriogonum soredium
Festuca dasyclada
Gilia spicata
Gutierrezia petradoria
Hedysarum occidentale var. *canone*
Hymenoxys depressa
Hymenoxys helenioides
Lepidium montanum var. *stellae*
Lygodesmia deloresensis
Mentzelia multicaulis var. *librina*
Oenothera flava var. *acutissma*
Penstemon acaulis var. *acaulis*
Penstemon angustifolius var. *dulcis*
Penstemon concinnus
Penstemon parvus
Penstemon tidestromii
Penstemon wardii
Schoencrambe argillacea
Schoencrambe suffrutescens
Sclerocactus pubispinus var. *pubispinus*
Selaginella utahensis
Thelesperma pubescens

Salt Desert Shrub

Arabis falcatoria
Astragalus cronquistii
Atriplex canescens var. *gigantea*
Camissonia atwoodii
Cryptantha compacta

Mentzelia argillosa
Pediocactus sileri
Pediocactus winkleri
Penstemon flowersii
Phacelia howelliana
Phacelia indecora
Phacelia utahensis
Proatriplex pleiantha
Psorothamnus polydenius var. *jonesii*
Sclerocactus wrightiae
Townsendia aprica
Townsendia jonesii var. *lutea*

Sedge-grass Meadow

Potentilla palustris
Ranunculus acris var. *aestivalis*
Senecio dimorphophyllus var. *intermedius*

Shadscale

Astragalus ampullarius
Astragalus equisolensis
Astragalus uncialis
Cryptantha creutzfeldtii
Cymopterus coulteri
Eriogonum batemanii var. *eremicum*
Eriogonum batemanii var. *ostlundii*
Hymenoxys depressa
Mentzelia shultziorum
Penstemon flowersii
Penstemon goodrichii
Penstemon grahamii
Penstemon nanus
Penstemon wardii
Schoencrambe argillacea
Schoencrambe barnebyi
Schoencrambe suffrutescens
Sclerocactus pubispinus var. *pubispinus*
Sphaeralcea caespitosa

Spruce-fir

Astragalus perianus
Cryptantha caespitosa
Cymopterus minimus
Cypripedium fasciculatum
Draba sobolifera
Haplopappus zionis
Lepidium montanum var. neeseae

Lesquerella garrettii
Penstemon cyananthus var. compactus
Penstemon parvus
Penstemon uintahensis
Silene petersonii
Trautvetteria caroliniensis

Wash Areas

Hedysarum occidentale var. *canone*
Viola purpurea var. *charlestonensis*

SPECIES BY SOIL TYPE

Agricultural Fields

Cuscuta warneri

Alluvium Substrates

Arctomecon humilis
Astragalus consobrinus
Cirsium ownbeyi
Cycladenia humilis var. *jonesii*
Cymopterus acaulis var. *higginsii*
Haplopappus crispus
Penstemon pinorum
Ranunculus acris var. *aestivalis*

Aquatic

Najas caespitosa

Calcareous Substrates

Astragalus uncialis
Cryptantha compacta
Cymopterus minimus
Erigeron untermannii
Pediomelum pariense
Penstemon concinnus
Penstemon nanus
Schoencrambe suffrutescens
Sclerocactus pubispinus var. *pubispinus*
Silene petersonii
Sphaeralcea caespitosa

Clay Substrates

Arctomecon humilis
Astragalus ampullarius
Astragalus cronquistii
Astragalus eremiticus var. *ampullarioides*
Astragalus iselyi
Astragalus perianus
Astragalus sabulosus
Astragalus uncialis
Astragalus wetherillii
Camissonia atwoodii
Camissonia exilis
Castilleja aquariensis

Cryptantha caespitosa
Cryptantha creutzfeldtii
Cycladenia humilis var. *jonesii*
Cymopterus coulteri
Eriogonum brevicaule var. *loganum*
Hedysarum occidentale var. *canone*
Hymenoxys depressa
Hymenoxys helenioides
Lupinus crassus
Mentzelia argillosa
Mentzelia multicaulis var. *librina*
Mentzelia shultziorum
Pediocactus winkleri
Penstemon acaulis var. *acaulis*
Penstemon flowersii
Penstemon gibbensii
Penstemon goodrichii
Phacelia howelliana
Phacelia indecora
Phacelia utahensis
Proatriplex pleiantha
Schoencrambe barnebyi
Townsendia aprica
Townsendia jonesii var. *lutea*

Conglomerate

Astragalus desereticus
Talinum thompsonii

Dolomitic Substrates

Aster kingii var. *kingii*
Eriogonum batemanii var. *eremicum*
Penstemon cyananthus var. *compactus*
Penstemon nanus
Primula maguirei
Sclerocactus pubispinus var. *pubispinus*
Sphaeralcea caespitosa

Duff Substrates

Cypripedium fasciculatum
Trautvetteria caroliniensis
Viola purpurea var. *charlestonensis*

Granitic Substrates

Draba kassii
Erigeron mancus
Eriogonum corymbosum var. *cronquistii*

Hackelia ibapensis
Haplopappus crispus

Gravelly Loam

Astragalus equisolensis
Astragalus holmgreniorum
Camissonia atwoodii
Haplopappus crispus
Pediomelum epipsilum
Penstemon navajoa
Penstemon pinorum
Podistera eastwoodiae
Potentilla cottamii
Sclerocactus glaucus
Thelesperma pubescens
Xylorhiza cronquistii

Hanging Gardens

Carex leptalea
Carex specuicola
Cirsium ownbeyi
Cirsium virginensis
Habenaria zothecina
Iris pariensis
Perityle specuicola
Potentilla palustris
Spiranthes diluvialis

Igneous Substrates

Astragalus perianus
Astragalus serpens
Astragalus subcinereus var. *basalticus*
Castilleja parvula var. *parvula*
Draba sobolifera

Limestone Substrates

Arabis vivariensis
Aster kingii var. *kingii*
Astragalus limnocharis var. *limnocharis*
Astragalus limnocharis var. *tabulaeus*
Astragalus montii
Castilleja parvula var. *revealii*
Cryptantha ochroleuca
Cymopterus minimus
Erigeron carringtonae
Erigeron cronquistii
Eriogonum aretioides

Eriogonum batemannii var. *eremicum*
Eriogonum brevicaule var. *loganum*
Eriogonum soredium
Festuca dasyclada
Gilia caespitosa
Gilia tenuis
Haplopappus zionis
Jamesia tetrapetala
Lepidium ostleri
Lesquerella garrettii
Musineon lineare
Pediocactus despainii
Penstemon bracteatus
Penstemon concinnus
Penstemon cyananthus var. *compactus*
Penstemon idahoensis
Penstemon parvus
Penstemon uintahensis
Primula domensis
Primula maguirei
Sphaeromeria capitata
Thelesperma subnudum var. *alpinum*
Trifolium andersonii var. *friscanum*
Viola purpurea var. *charlestonensis*

Loam

Astragalus henrimontanensis
Castilleja aquariensis
Hymenoxys depressa
Hymenoxys helenioides
Penstemon atwoodii
Penstemon gibbensii
Penstemon uintahensis
Senecio dimorphophyllus var. *intermedius*

Quartzite Substrates

Aster kingii var. *barnebyana*
Cirsium ownbeyi
Gutierrezia petradoria
Haplopappus crispus
Oenothera flava var. *acutissma*

Sandstone Substrates

Arabis vivariensis
Asplenium adiantum-nigrum
Astragalus barnebyi
Astragalus cronquistii

Astragalus monumentalis
Astragalus sabulosus
Carex curatorum
Dalea flavescens
Draba pectiniphila
Echinocereus triglochidiatus var. *inermis*
Erigeron kachinensis
Erigeron maguirei var. *harrisonii*
Erigeron maguirei var. *maguirei*
Erigeron sionis
Erigeron untermannii
Erigeron zothecinus
Eriogonum corymbosum var. *smithii*
Gilia caespitosa
Hymenoxys lapidicola
Jamesia americana var. *zionis*
Lepidium montanum var. *neeseae*
Lygodesmia deloresensis
Lygodesmia entrada
Oreoxis trotteri
Ostrya knowltonii
Pediocactus winkleri
Penstemon idahoensis
Selaginella utahensis
Sphaeromeria ruthiae
Thelesperma subnudum var. *alpinum*

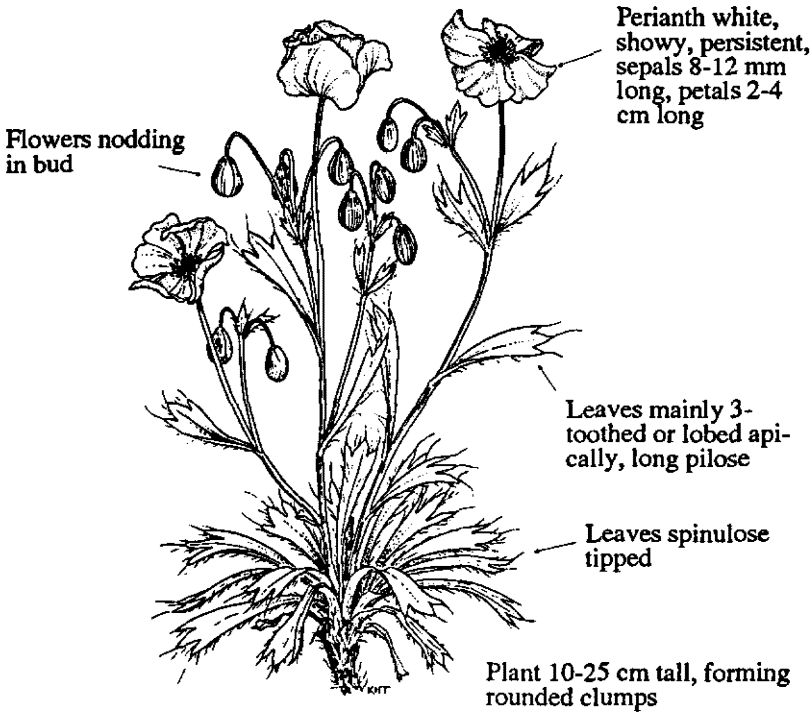
Sandy Substrates

Arctomecon humilis
Asclepias cutleri
Asclepias welshii
Astragalus consobrinus
Astragalus cronquistii
Astragalus desereticus
Astragalus equisolensis
Astragalus hamiltonii
Astragalus holmgreniorum
Astragalus oophorus var. *lonchocalyx*
Astragalus preusii var. *cutleri*
Astragalus sabulosus
Atriplex canescens var. *gigantea*
Cirsium ownbeyi
Cryptantha cinerea var. *arenicola*
Cycladenia humilis var. *jonesii*
Cymopterus acaulis var. *higginsii*
Cymopterus beckii
Dalea flavescens var. *epica*
Draba pectiniphila
Erigeron canaani

Eriogonum corymbosum var. *smithii*
Eriogonum nummulare var. *ammophilum*
Haplopappus crispus
Heterotheca jonesii
Hymenoxys lapidicola
Lomatium latilobum
Lupinus crassus
Lygodesmia deloresensis
Oenothera flava var. *acutissima*
Pediocatus sileri
Pediocactus winkleri
Pediomelum epipsilum
Pediomelum pariense
Penstemon acaulis var. *acaulis*
Penstemon ammophilus
Penstemon angustifolius var. *dulcis*
Penstemon uintahensis
Psorothamnus thompsoniae var. *whitingii*
Viola purpurea var. *charlestonensis*

Shale Substrate

Aquiliegia barnebyi
Astragalus barnebyi
Astragalus lutosus
Astragalus sabulosus
Camissonia atwoodii
Cryptantha creutzfeldii
Cymopterus coulteri
Eriogonum batemanii var. *ostlundii*
Festuca dasyclada
Gilia spicata
Lepidium barnebyanum
Lepidium montanum var. *stellae*
Lesqerella tumulosa
Mentzelia argillosa
Papaver radicatum var. *pygmaeum*
Penstemon acaulis var. *acaulis*
Penstemon gibbensii
Penstemon grahamii
Penstemon idahoensis
Penstemon scariousus var. *albifluvis*
Penstemon tidestromii
Penstemon wardii
Phacelia argillacea
Psorothamnus polydenius var. *jonesii*
Schoencrambe argillacea
Sclerocactus wrightiae
Townsendia jonesii var. *lutea*


Perianth white, showy, persistent, sepals 8-12 mm long, petals 2-4 cm long
Flowers nodding in bud
Leaves mainly 3-toothed or lobed apically, long pilose
Leaves spinulose tipped
Plant 10-25 cm tall, forming rounded clumps

ARCTOMECON HUMILIS

Scientific Name: *Arctomecon humilis* Coville

Common Name: Dwarf bearclaw-poppy or Bear poppy

Family (Common name): Papaveraceae (Poppy Family)

Synonyms: None

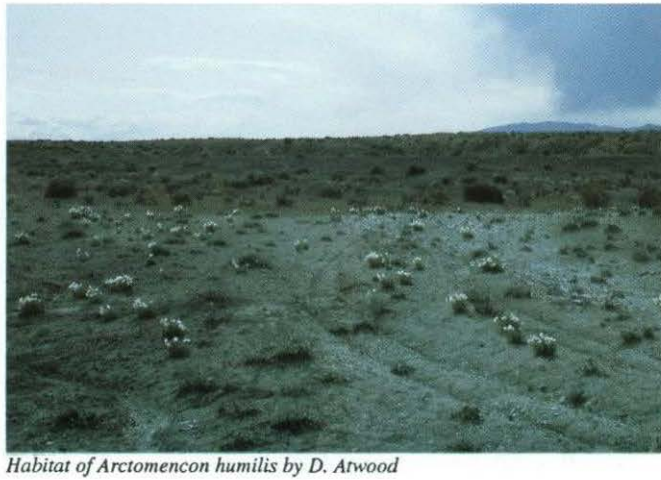
Global Distribution: Endemic to Washington County, Utah

Management Responsibility: BLM-Cedar City District, State Trust Lands and private

Habitat: Restricted to the Shnabkaib, middle red, and Shinarump members of the Moenkopi Formation on rolling low hills and bluffs; warm, open desert shrub community between 2,700-3,300 feet elevation, March-May.

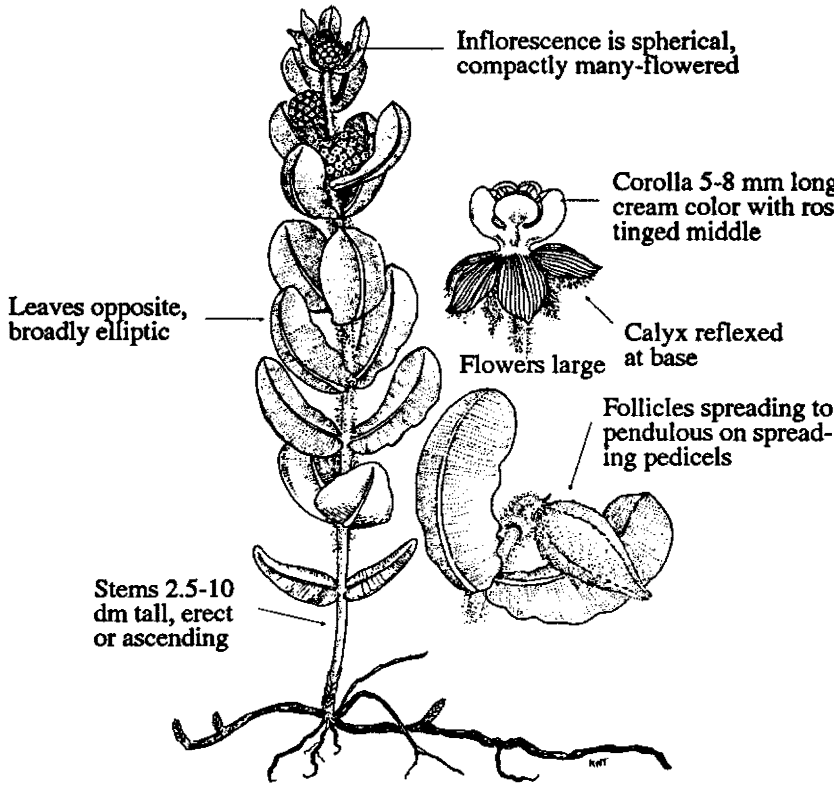
Look-alikes: Similiar to *A. merriamii*, but differs in its smaller more compact clump forming habit, smaller petals (1.5 cm long), sparingly pilose leaves, persistent perianth, and distribution.

Closeup of Arctomecon humilis by D. Atwood



Habitat of Arctomencon humilis by D. Atwood

Species
Distribution


Inflorescence is spherical, compactly many-flowered
Corolla 5-8 mm long, cream color with rose tinged middle
Leaves opposite, broadly elliptic
Calyx reflexed at base
Flowers large
Follicles spreading to pendulous on spreading pedicels
Stems 2.5-10 dm tall, erect or ascending

ASCLEPIAS WELSHII

Scientific Name: *Asclepias welshii* N. & P. Holmgren

Common Name: Welsh's Milkweed

Family (Common Name): Asclepiadaceae (Milkweed Family)

Synonyms: None

Global Distribution: Restricted to Kane County, Utah and adjacent Coconino County, Arizona

Management Responsibility: BLM-Cedar City and Arizona Strip District and Coral Pink Sand Dunes State Park

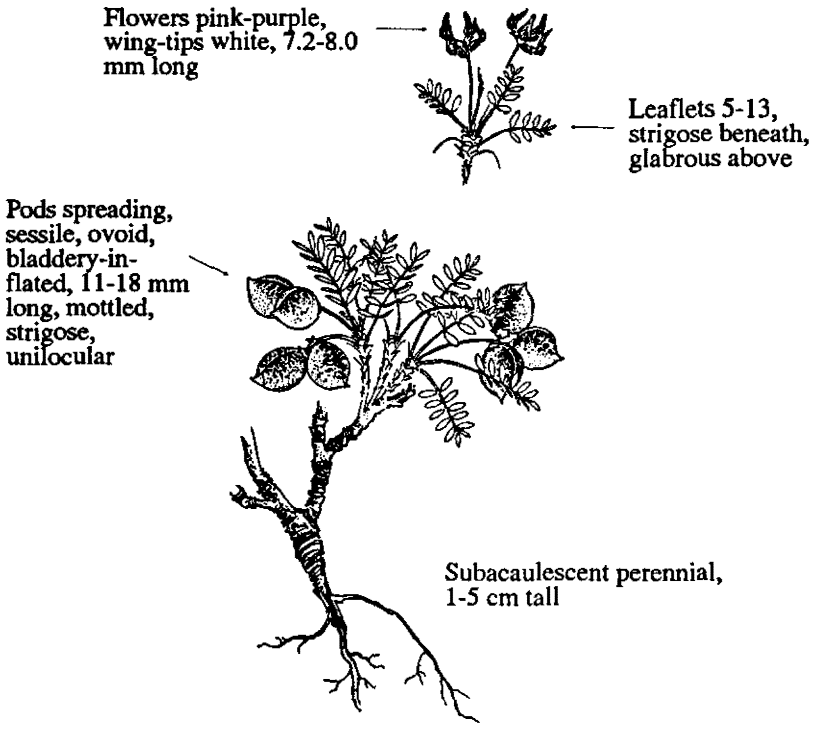
Habitat: Sand dunes in sagebrush, juniper, and ponderosa pine communities at 5,570-6,230 feet elevation, July-early September.

Look-alikes: A distinct species with no close relatives, recognized by the large seeds (20+ mm long), spreading to pendulous follicles, cottony-pubescent pedicles, 8-13 (20) mm long, the main leaves obovate or broadly elliptic, rounded to truncate apically, 6-9.5 cm long (mostly) with a rudimentary, early deciduous plume. May be confused with *A. latifolia* which differs in having erect follicles, sessile inflorescence, and glabrous leaves when mature.

Habitat of Asclepias welshii by L. England

Closeup on Asclepias welshii by L. England

Species
Distribution


Flowers pink-purple, wing-tips white, 7.2-8.0 mm long
Leaflets 5-13, strigose beneath, glabrous above
Pods spreading, sessile, ovoid, bladdery-inflated, 11-18 mm long, mottled, strigose, unilocular
Subacaulescent perennial, 1-5 cm tall

ASTRAGALUS MONTII

Scientific Name: *Astragalus montii* Welsh

Common Name: Heliotrope milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Astragalus limnocharis* Barneby var. *montii* (Welsh) Isley

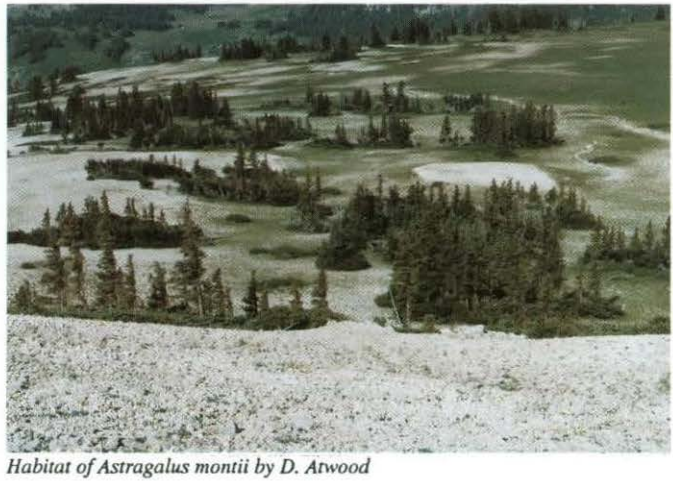
Global Distribution: Endemic to central Utah in Sanpete and Sevier counties

Management Responsibility: Manti-LaSal NF

Habitat: Alpine areas in a mixed grass-forb community on windblown ridges and snowdrift sites between 10,500-11,000 feet elevation, July-August.

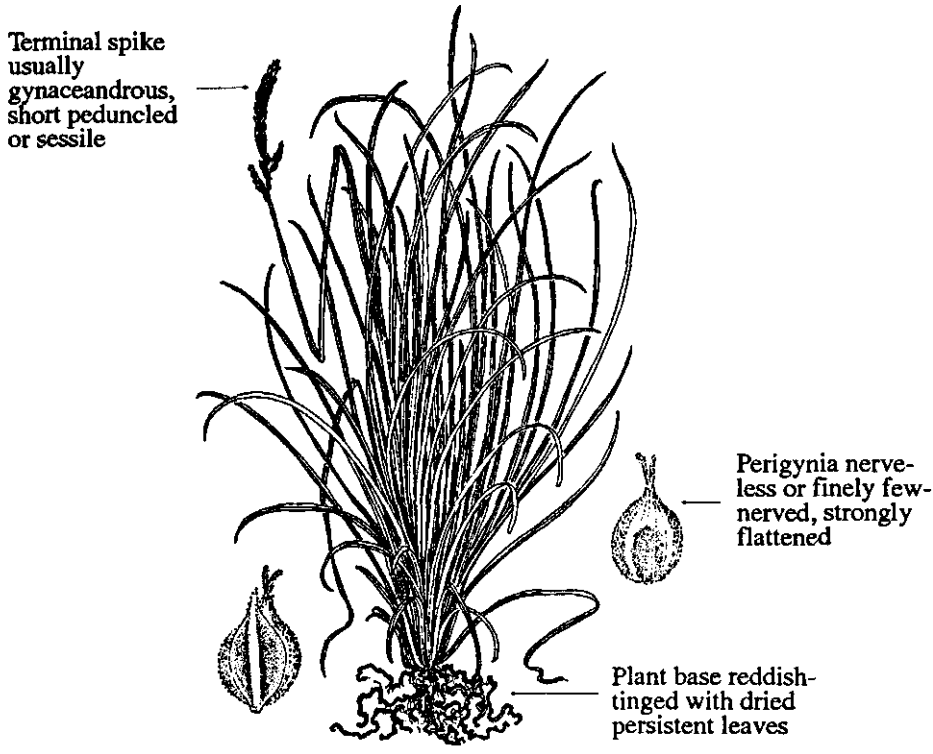
Look-alikes: Similar to *A. limnocharis* var. *tabulaeus*, but differing by its pink purple flowers and contrasting large white wing-tips, the lack of soboliferous stems, and by the strigose leaflet margins vs long-ciliate.

Closeup of Astragalus montii by J. Tuhy



Habitat of Astragalus montii by D. Atwood

Species
Distribution


Terminal spike usually gynaceandrous, short peduncled or sessile
Perigynia nerveless or finely few-nerved, strongly flattened
Plant base reddish-tinged with dried persistent leaves

CAREX SPECUICOLA

Scientific Name: *Carex specuicola* J. T. Howell

Common Name: Navajo sedge

Family (Common Name): Cyperaceae (Sedge Family)

Synonyms: None

Global Distribution: Endemic to the Navajo Nation, Coconino County, Arizona and San Juan County, Utah

Management Responsibility: Navajo Nation TL-Shonto, Inscription House, Oljato?, and Navajo Mountain? Chapters, Glen Canyon NRA?

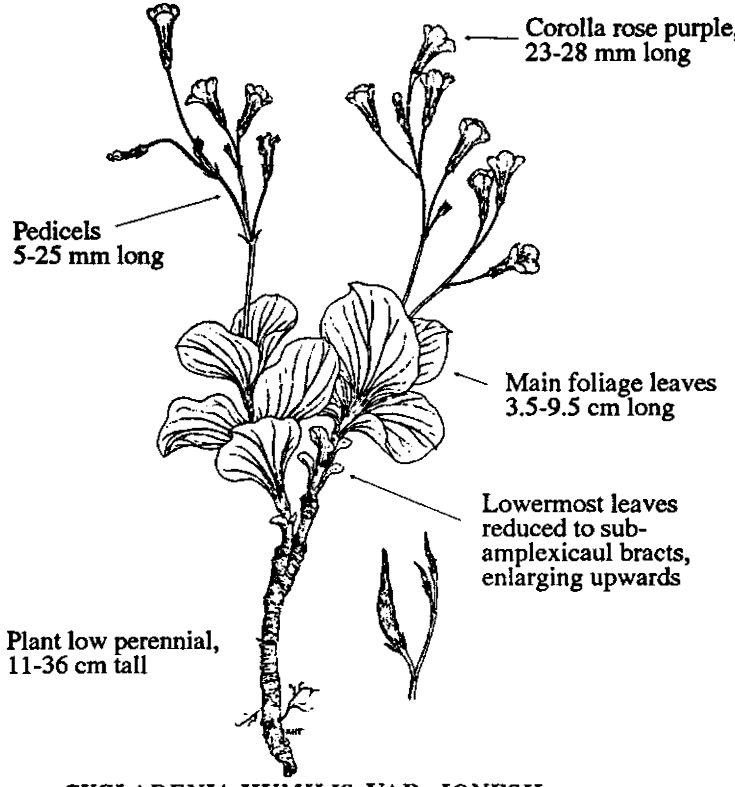
Habitat: Restricted to Navajo Sandstone seeps-springs, pockets, or hanging gardens, ranging from almost inaccessible sheer cliff faces to accessible alcoves at 5,710 to 5,980 feet elevation, late June-July.

Look-alikes: There is no other *Carex* species that occurs with *C. specuicola*. In the Rocky Mountains *C. specuicola* resembles *C. atrata* L. and other related species.

Closeup of Carex specuicola by D. House

Habitat of Carex specuicola by D. House

Species
Distribution



CYCLADENIA HUMILIS VAR. *JONESII*

Scientific Name: *Cycladenia humilis* Benth. var. *jonesii* Welsh & Atwood

Common Name: Jones cycladenia

Family (Common Name): Apocynaceae (Dogbane Family)

Synonyms: None

Global Distribution: Endemic to Emery, Garfield, Grand, and Kane? counties, Utah and Coconino County, Arizona

Management Responsibility: BLM-Moab, Richfield?, and Cedar City Districts, Glen Canyon NRA, Capitol Reef NP

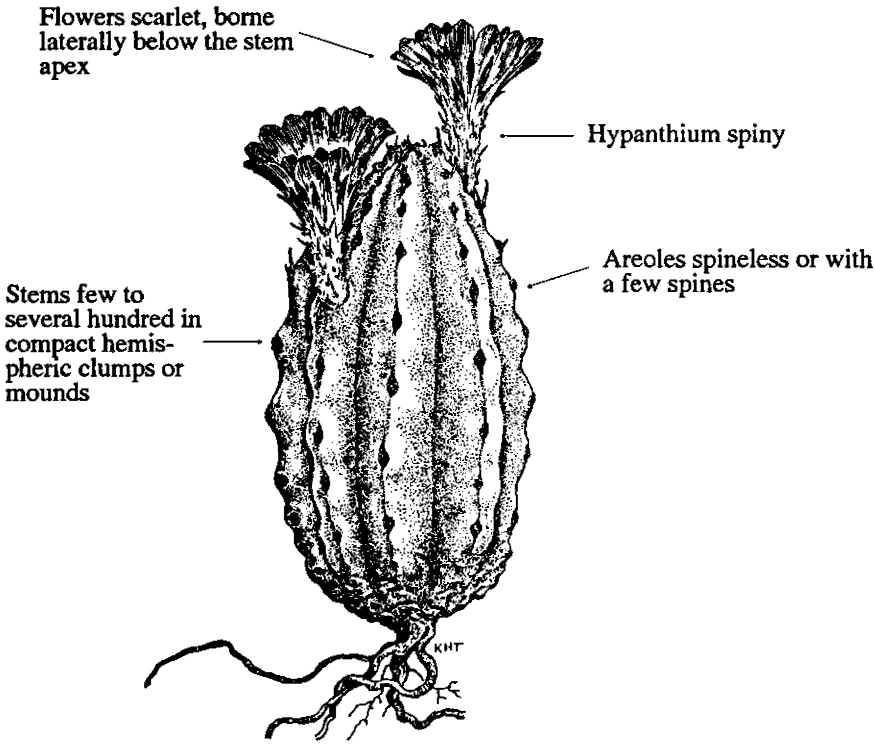
Habitat: Gypsiferous saline soils on the Chinle, Cutler, and Summerville Formations in cool desert shrub and juniper communities between 4,400-6,000 feet, mid May to June.

Look-alikes: Similar to var. *venusta*, a montane California taxon.

Closeup of Cycladenia humilis var. jonesii by J. Holland

Habitat on Cycladenia humilis var. jonesii by J. Holland

Species Distribution


Flowers scarlet, borne laterally below the stem apex
Hypanthium spiny
Areoles spineless or with a few spines
Stems few to several hundred in compact hemispheric clumps or mounds
KHT

ECHINOCEREUS TRIGLOCHIDIATUS VAR. *INERMIS*

Scientific Name: *Echinocereus triglochidiatus* Engelm var. *inermis* (K. Schum) Rowley

Common Name: Spineless hedgehog cactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: *E. phoeniceus* var. *inermis* K. Schum

Global Distribution: Grand and San Juan counties of southeastern Utah and adjacent Colorado

Management Responsibility: Manti-LaSal NF, BLM-Cedar City, Moab, Montrose and Grand Junction Districts and private

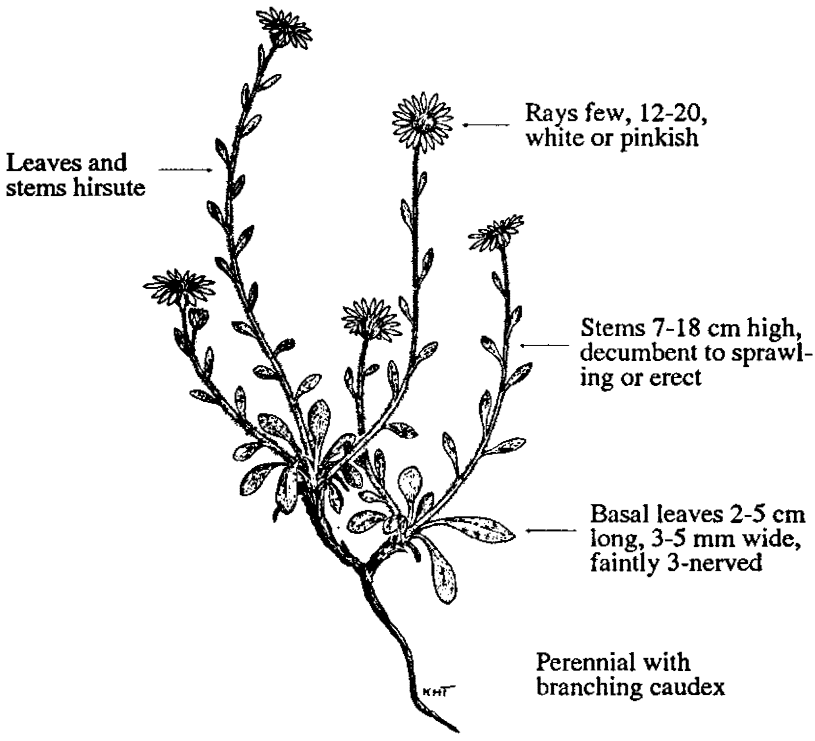
Habitat: Pinyon-juniper woodlands, shallow soils, between 5,000-8,000 feet elevation, May-July.

Look-alikes: Differing from var. *melanacanthus* in lacking spines (in some populations).

Closeup of Echinocereus triglochidiatus var. inermis by J. Ratzloff

Habitat of Echinocereus triglochidiatus var. inermis by J. Ratzloff

Species Distribution


Leaves and stems hirsute
Rays few, 12-20, white or pinkish
Stems 7-18 cm high, decumbent to sprawling or erect
Basal leaves 2-5 cm long, 3-5 mm wide, faintly 3-nerved
Perennial with branching caudex

ERIGERON MAGUIREI VAR. *MAGUIREI*

Scientific Name: *Erigeron maguirei* Cronq. var. *maguirei*

Common Name: Maguire daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

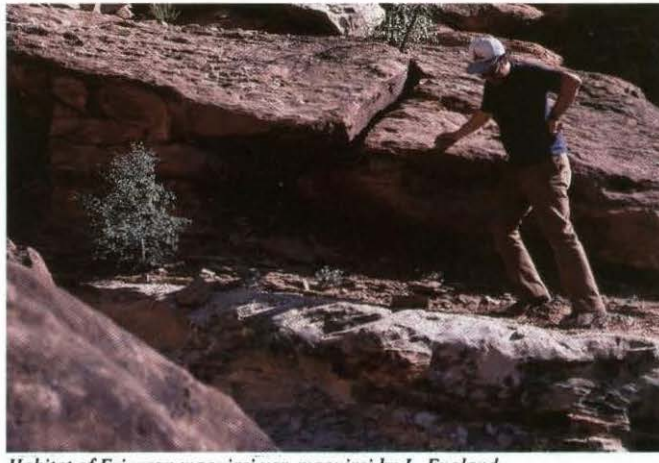
Global Distribution: Endemic to the San Rafael Swell, Emery county, Utah

Management Responsibility: BLM-Moab District

Habitat: Cool, moist mesic wash bottoms and dry, partially shaded slopes of eroded sandstone cliffs. Wingate, Chinle, and Navajo Sandstone Formantions in mountain shrub, Douglas fir, ponderosa pine, and lower limits of the juniper woodland communities between 5,600-7,200 feet elevation, June-July.

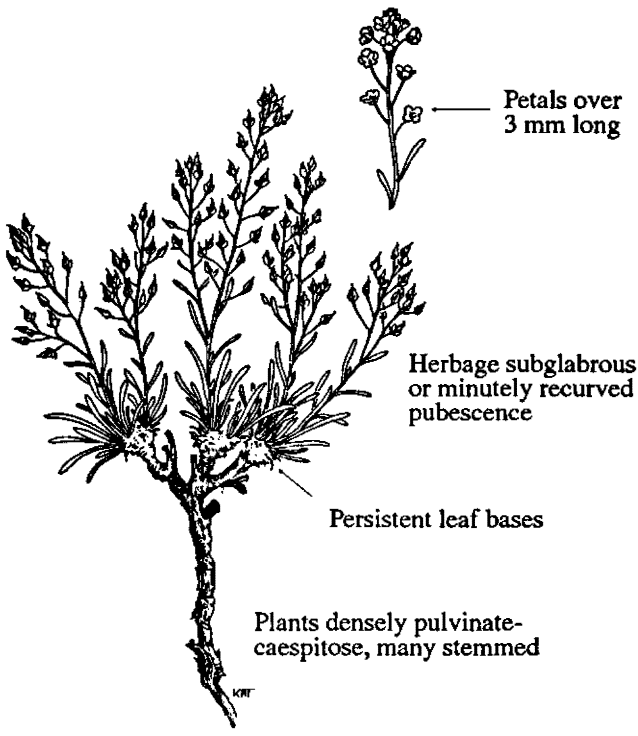
Look-alikes: Similiar to *E. caespitosus* and *E. jonesii,* but differs in having few ligules (12-20), hirsute pubescence, and faintly, if at all, 3-nerved leaves; and from var. *harrisonii* which has more heads per stem, narrower ray corollas, and shorter disk corollas.

Closeup of Erigeron maguirei var. maguirei by L. England



Habitat of Erigeron maguirei var. maguirei by L. England

Species Distribution



LEPIDIUM BARNEBYANUM

Scientific Name: *Lepidium barnebyanum* Reveal

Common Name: Barneby peppergrass

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

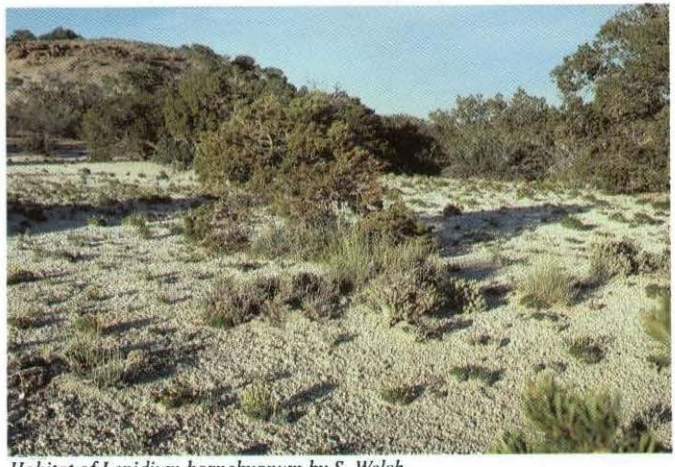
Global Distribution: Endemic to Indian Canyon drainage, Duchesne County, Utah

Management Responsibility: Ute TL-North Unit and private?

Habitat: White shale outcrops on the Uinta Formation in pinyon-juniper (mainly on ridge crests) at 6,200 to 6,500 feet elevation, May-June.

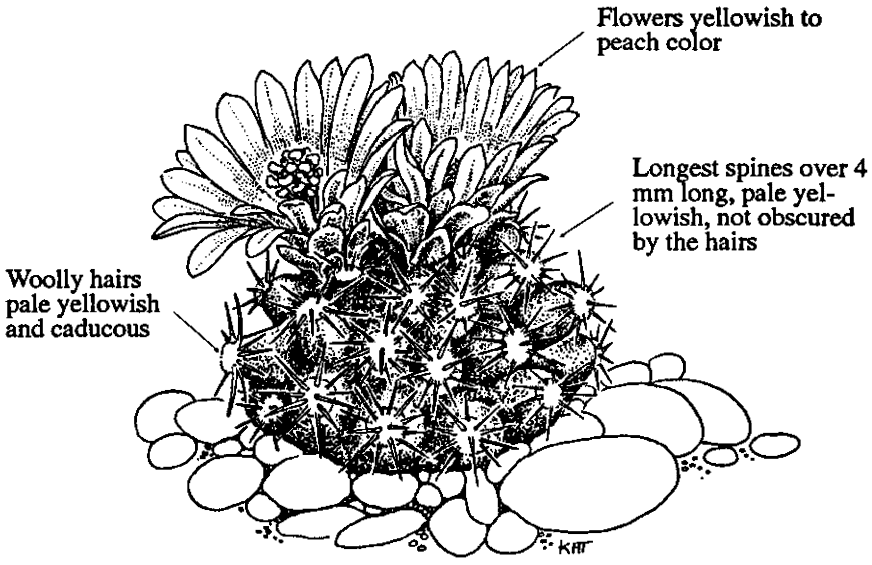
Look-alikes: Very distinct and easily recognized by the clump forming habit, marcescent leaf bases, subglabrous or minutely recurved scaberulous pubescence, and petals over 3 mm long.

Closeup of Lepidium barnebyanum by S. Welsh



Habitat of Lepidium barnebyanum by S. Welsh

Species
Distribution


Flowers yellowish to peach color
Longest spines over 4 mm long, pale yellowish, not obscured by the hairs
Woolly hairs pale yellowish and caducous
KHT

Small depressed-hemispheric plants 3.8-6 cm tall

PEDIOCACTUS DESPAINII

Scientific Name: *Pediocactus despainii* Welsh & Goodrich

Common Name: Despain Footcactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: None

Global Distribution: Endemic to Central Utah in Emery County

Management Responsibility: Capitol Reef NP and BLM-Moab and Richfield District

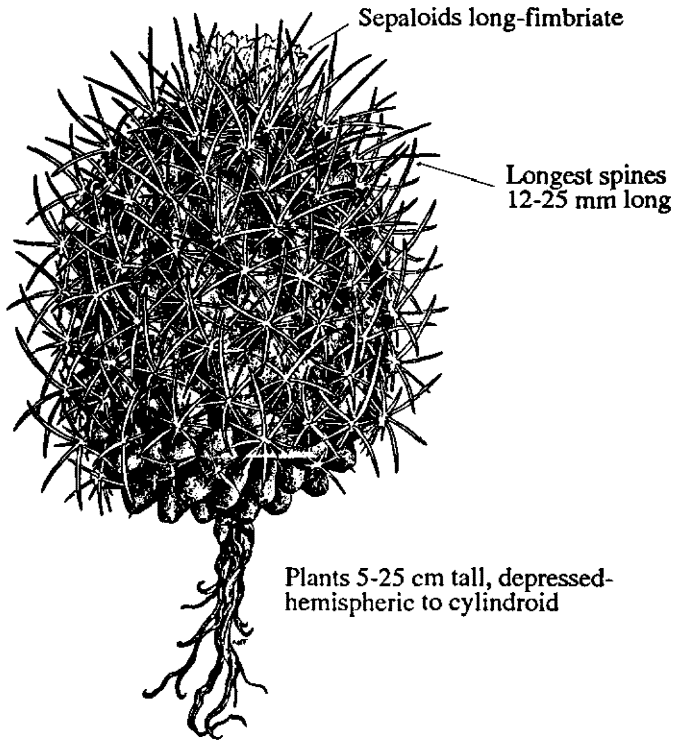
Habitat: Open pinyon-juniper community on limestone gravels at 6,000-6,200 feet elevation, late April-early May.

Look-alikes: Related to *P. winkleri*, but distinguished from it by having the longest spines over 4 mm long, these pale yellowish and not obscured by the hairs, woolly hairs pale yellowish and caducous, with yellowish to peach colored flowers.

Closeup of Pediocactus despainii by K. Heil

Habitat of Pediocactus despainii by K. Heil

Species Distribution



PEDIOCACTUS SILERI

Scientific Name: *Pediocactus sileri* (Engelm.) L. Benson

Common Name: Siler pincushion cactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: *Echinocactus sileri* Engelm. in Coult. , *Utahia sileri* (Engelm.) Britt. & Rose

Global Distribution: Southwestern Utah, Kane and Washington counties; Mohave and Coconino counties, Arizona

Management Responsibility: BLM-Cedar City and Arizona Strip Districts, Kaibab TL, State Trust Lands and private

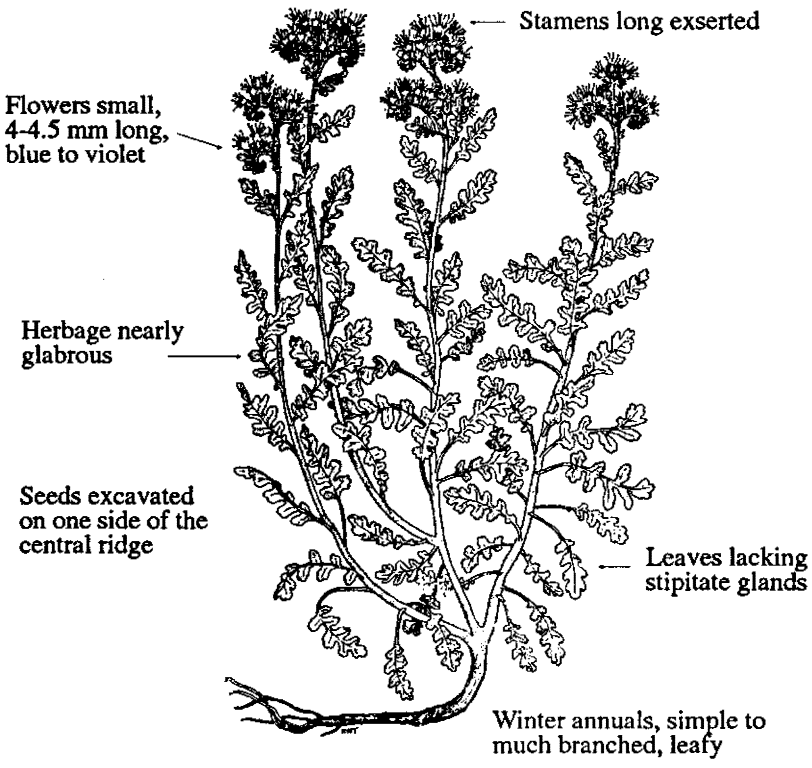
Habitat: Red and gray gypsiferous, seleniferous, calciferous and shales of the Moenkopi Formation in salt desert shrub communities between 3,000-5,000 feet elevation, June-August.

Look-alikes: A distinct straight spined species with the longest spines 12-25 mm long and the sepaloids long-fimbriate.

Closeup of Pediocactus sileri by L. England

Habitat of Pediocactus sileri by D. Atwood

Species
Distribution


Stamens long exserted
Flowers small, 4-4.5 mm long, blue to violet
Herbage nearly glabrous
Seeds excavated on one side of the central ridge
Leaves lacking stipitate glands
Winter annuals, simple to much branched, leafy

PHACELIA ARGILLACEA

Scientific Name: *Phacelia argillacea* Atwood

Common Name: Clay phacelia

Family (Common Name): Hydrophyllaceae (Waterleaf Family)

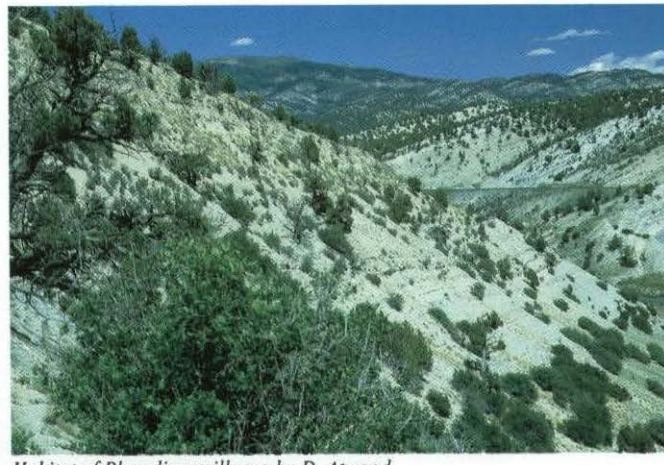
Synonyms: *Phacelia glandulosa* Nutt. var. *argillacea* Atwood in Welsh & Moore

Global Distribution: Endemic to Spanish Fork Canyon, Utah County, Utah

Management Responsibility: Adjacent to the Manti-LaSal and Uinta NF's on private lands and UDOT; TNC has purchased 70 acres on the west side of the highway

Habitat: Pinyon-juniper and mountain brush communities on sparsely vegetated slopes of the Green River Shale Formation at about 6,610 feet elevation, June-July.

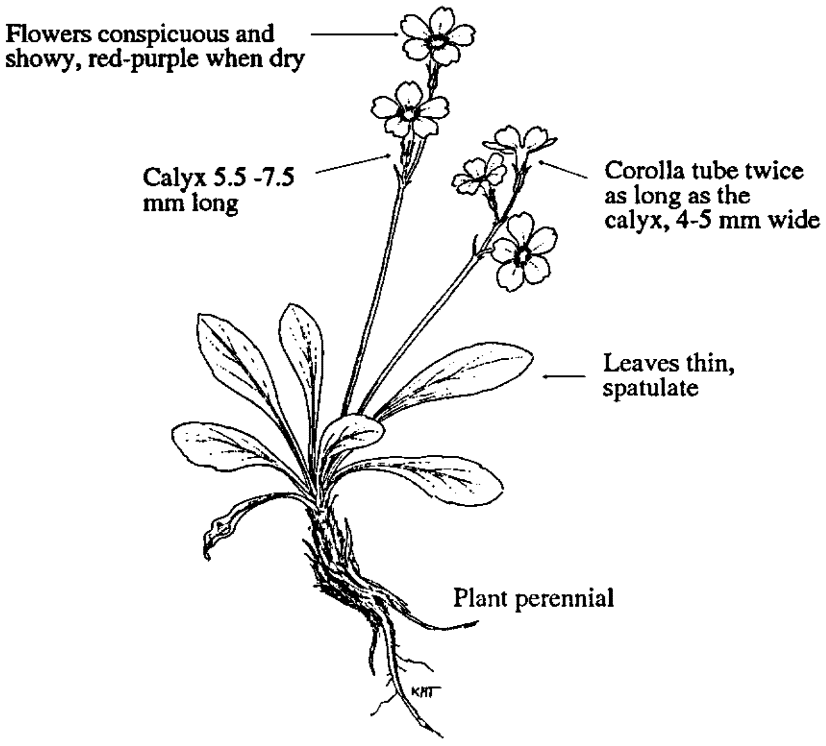
Look-alikes: Related to *P. glandulosa* and *P. bakeri*, but differing by its more nearly glabrous herbage, smaller capsules (3.2-3.3 mm), flowers (5 mm), seed morphology, and distribution.



Habitat of Phacelia argillacea by D. Atwood

Closeup of Phacelia argillacea by D. Atwood

Species
Distribution


Flowers conspicuous and showy, red-purple when dry
Calyx 5.5 -7.5 mm long
Corolla tube twice as long as the calyx, 4-5 mm wide
Leaves thin, spatulate
Plant perennial

PRIMULA MAGUIREI

Scientific Name: *Primula maguirei* L.O. Williams

Common Name: Maguire primrose

Family (Common Name): Primulaceae (Primrose Family)

Synonyms: None

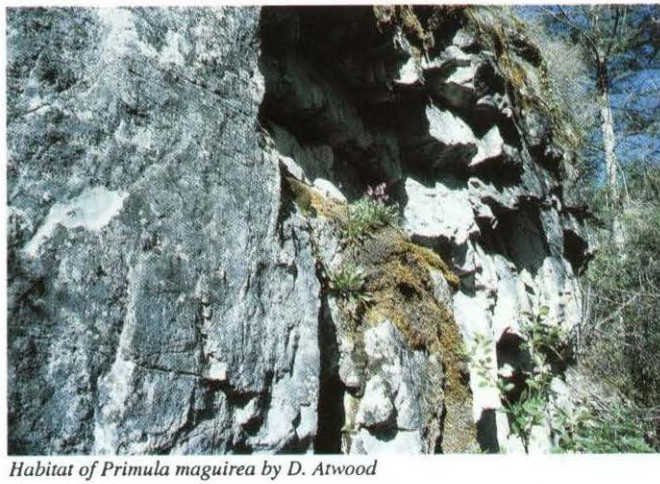
Global Distribution: Endemic to Logan Canyon, Cache County, Utah

Management Responsibility: Wasatch-Cache NF

Habitat: Damp overhanging cliffs, rocks, and crevices in mixed aspen/conifer community at 5,080-5,510 feet elevation, April-May.

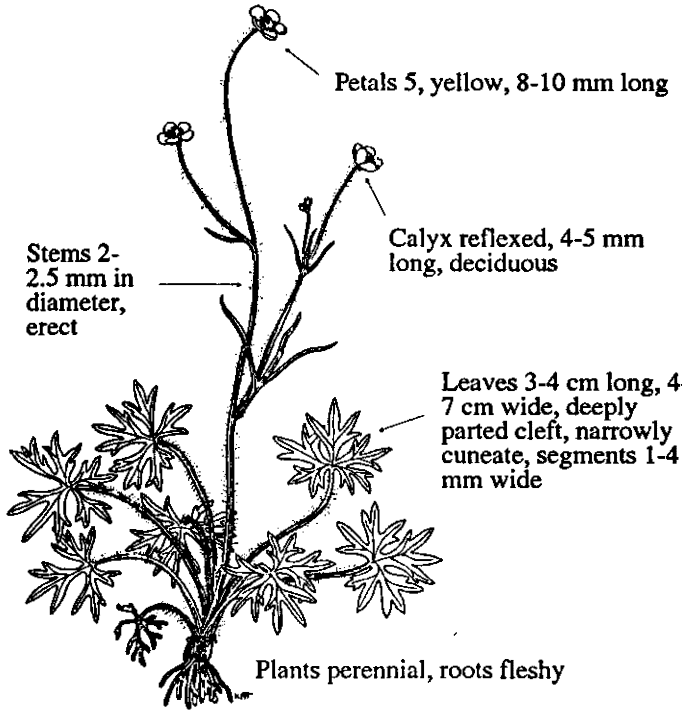
Look-alikes: Similar to other primula's, but different in having the calyx 5.5-7.5 mm long, and obovate, and 4-5 mm wide corolla lobes.

Closeup of Primula maguirea by L. England



Habitat of Primula maguirea by D. Atwood

Species
Distribution


Petals 5, yellow, 8-10 mm long
Calyx reflexed, 4-5 mm long, deciduous
Stems 2-2.5 mm in diameter, erect
Leaves 3-4 cm long, 4-7 cm wide, deeply parted cleft, narrowly cuneate, segments 1-4 mm wide
Plants perennial, roots fleshy

RANUNCULUS ACRIS VAR. *AESTIVALIS*

Scientific Name: *Ranunculus acris* L. var. *aestivalis* (Benson) Welsh

Common Name: Autumn buttercup

Family (Common Name): Ranunculaceae (Buttercup Family)

Synonyms: *Ranunculus acriformis* Gray var. *aestivalis* Benson

Global Distirbution: Endemic to southcentral Utah in Garfield County

Management Responsibility: The one extant population is in a TNC Preserve

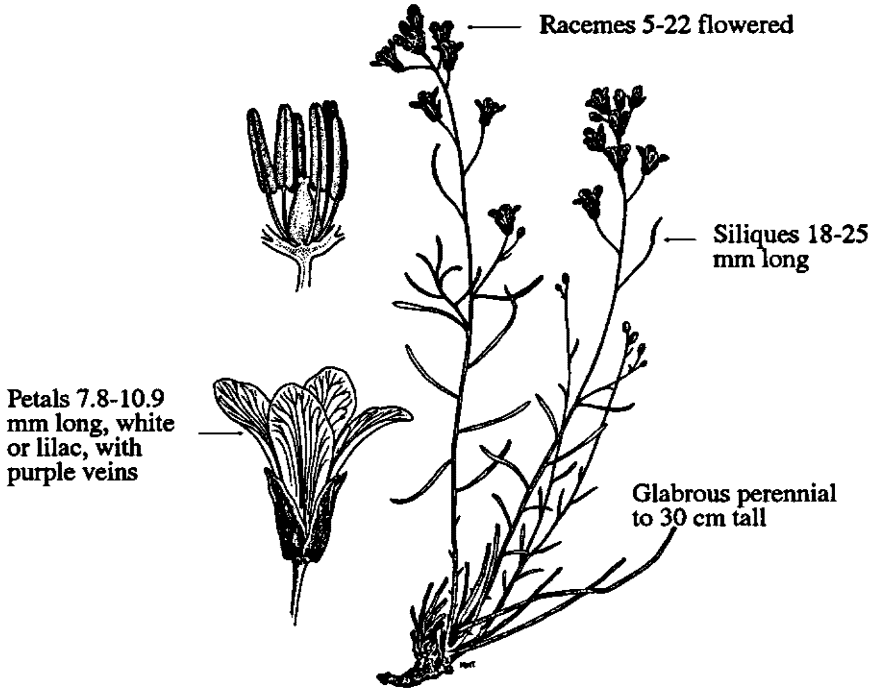
Habitat: Sedge/grass meadow at 6,440 feet elevation, August and September.

Look-alikes: Similar to var. *acris* but, differs in having narrowly cuneate leaf segments with the ultimate segments mostly 1-4 mm wide.

Closeup of Ranunculus acris var. aestivalis by K. Mutz

Habitat of Ranunculus acris var. aestivalis by D. Atwood

Species
Distribution


Racemes 5-22 flowered
Siliques 18-25 mm long
Petals 7.8-10.9 mm long, white or lilac, with purple veins
Glabrous perennial to 30 cm tall

SCHOENCRAMBE ARGILLACEA

Scientific Name: *Schoencrambe argillacea* (Welsh & Atwood) Rollins

Common Name: Clay thelypody or Bookcliffs schoencrambe

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Thelypodiopsis argillacea* Welsh & Atwood

Global Distribution: Endemic to the Bookcliffs in Uintah County, Utah

Management Responsibility: BLM-Vernal District, Ute TL-Hill Creek Extension? and private?

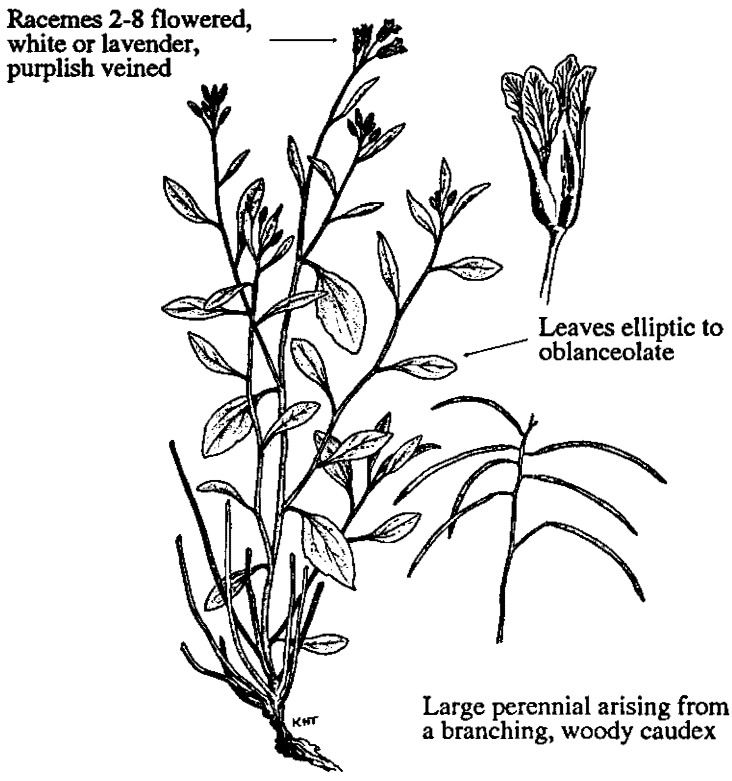
Habitat: Mixed desert shrub community of shadscale, Indian ricegrass and pygmy sagebrush species on the lower Uinta and upper Green River Shale formations at 5,000-5,650 feet elevation, May-early June.

Look-alikes: Closely related to *S. barnebyi* (Emery County, Utah) which is larger in most respects. *S. argillacea* is distinct in having linear to narrowly oblong, sessile cauline leaves, 5-22 flowered racemes and 18-25 mm long siliques.

Closeup of Schoencrambe argillacea by L. Shultz

Habitat of Schoencrambe argillacea by L. Shultz

Species Distribution


Racemes 2-8 flowered, white or lavender, purplish veined
Leaves elliptic to oblanceolate
Large perennial arising from a branching, woody caudex
KHT

SCHOENCRAMBE BARNEBYI

Scientific Name: *Schoencrambe barnebyi* (Welsh & Atwood) Rollins

Common Name: Barneby thelypody

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Thelypodiopsis barnebyi* Welsh & Atwood

Global Distribution: Emery and Wayne Counties, Utah

Management Responsibility: Capitol Reef NP and BLM-Moab and Richfield Districts

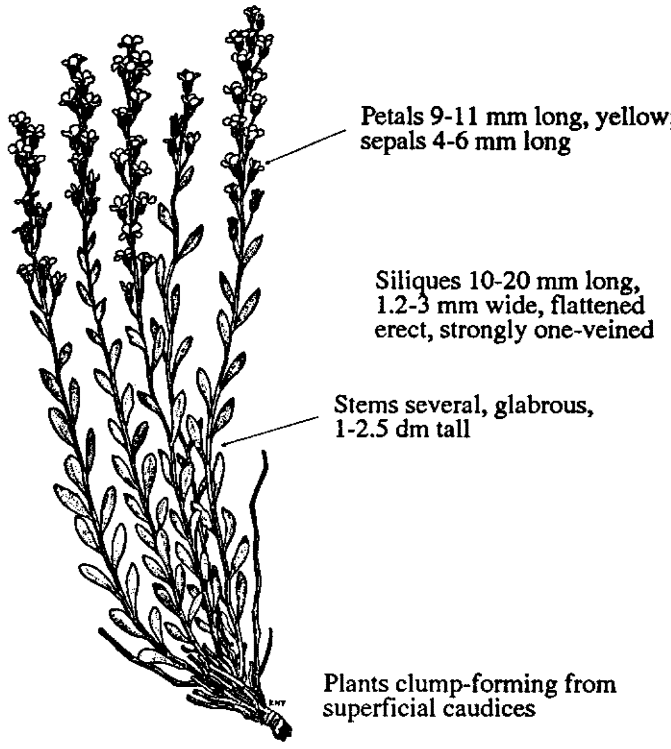
Habitat: Mixed shadscale, eriogonum and ephedra communities on the Chinle Formation at 5,600 to 5,700 feet elevation, May.

Look-alikes: Similar to *S. argillacea,* but differs in being larger in all its parts.

Closeup of Schoencrambe barnebyi by L. England

Habitat of Schoencrambe barnebyi by L. England

Species Distribution


Petals 9-11 mm long, yellow; sepals 4-6 mm long
Siliques 10-20 mm long, 1.2-3 mm wide, flattened erect, strongly one-veined
Stems several, glabrous, 1-2.5 dm tall
Plants clump-forming from superficial caudices

SCHOENCRAMBE SUFFRUTESCENS

Scientific Name: *Schoencrambe suffrutescens* (Rollins) Welsh & Chatterly

Common Name: Shrubby reed-mustard

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Thelypodium suffrutescens* Rollins in Graham; *Glaucocarpum suffrutescens* (Rollins) Rollins

Global Distribution: Endemic to Uintah and Duchesne counties northeastern Utah

Management Responsibility: BLM-Vernal District, Ute TL-Hill Creek Extension, State Trust Lands and private

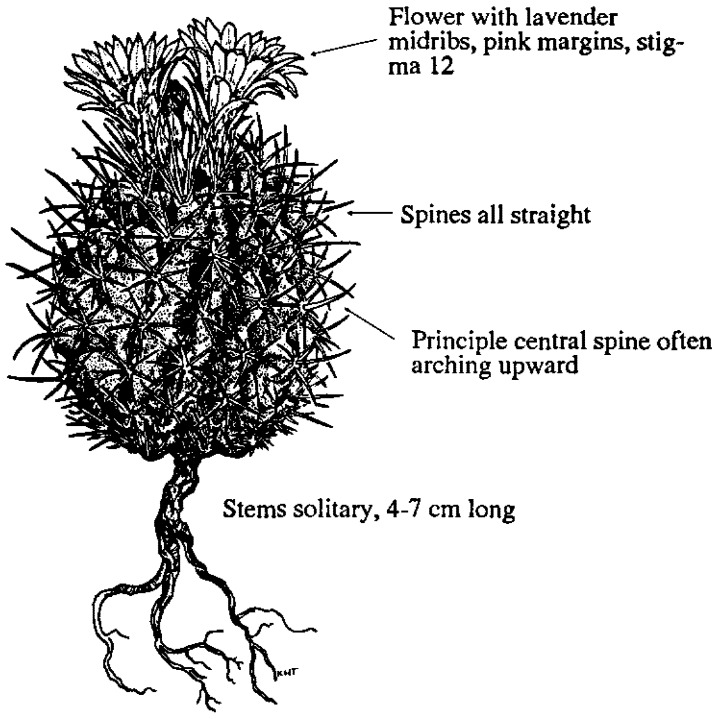
Habitat: Calcareous shale of the Green River Shale Formation in shadscale, pygmy sagebrush, mountain mahogany, juniper, and other mixed desert shrub communities at 5,400-6,000 feet elevation, late May-mid August.

Look-alikes: Similiar to *S. argillacea*, but easily distinguished by its yellow flowers and clump-forming habit.

Closeup of Schoencrambe suffrutescens by S. Welsh

Habitat of Schoencrambe suffrutescens by L. Shultz

Species
Distribution


Flower with lavender midribs, pink margins, stigma 12
Spines all straight
Principle central spine often arching upward
Stems solitary, 4-7 cm long

SCLEROCACTUS GLAUCUS

Scientific Name: *Sclerocactus glaucus* (K. Schum.) L. Benson

Common Name: Uinta Basin hookless cactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: *Echinocactus glaucus* K. Schum, *E. subglaucus* Rydb., *E. whipplei* Engelm. & Biglow var. *glaucus* (K. Schum.) J.A. Purpus, *Sclerocactus franklinii* J.W. Evans, *S. whipplei* (Engelm.) Britt. & Rose var. *glaucus* (K. Schum.) L. Benson

Global Distribution: Duchesne and Uintah counties of northeastern Utah and adjacent west-central Colorado

Management Responsibility: BLM-Vernal and Craig Districts, Ute TL-Hill Creek Extension, State Trust Lands, and Ouray FWS Refuge

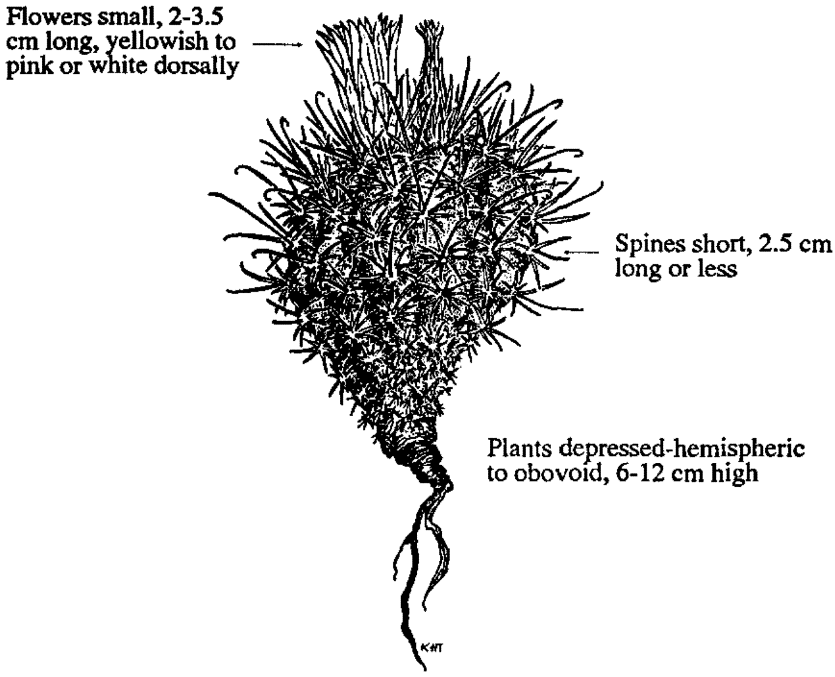
Habitat: Gravelly hills and terraces on Quaternary and Tertiary alluvium soils in cold desert shrub communities between 4,700-6,000 feet elevation, May-June.

Look-alikes: Closely related to var. *roseus*, but differing from that variety by having all straight spines (mostly) and the principle central spine often arching upward.

Closeup of Sclerocactus glaucus by L. Shultz

Habitat of Sclerocactus glaucus by K. Mutz

Species
Distribution


Flowers small, 2-3.5 cm long, yellowish to pink or white dorsally
Spines short, 2.5 cm long or less
Plants depressed-hemispheric to obovoid, 6-12 cm high

SCLEROCACTUS WRIGHTIAE

Scientific Name: *Sclerocactus wrightiae* Benson

Common Name: Wright fishhook cactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: *Pediocactus wrightiae* Cronq.

Global Distribution: Emery and Wayne counties in southcentral Utah

Management Responsibility: BLM-Moab and Richfield Districts, Capitol Reef NP, State Trust Lands, and private

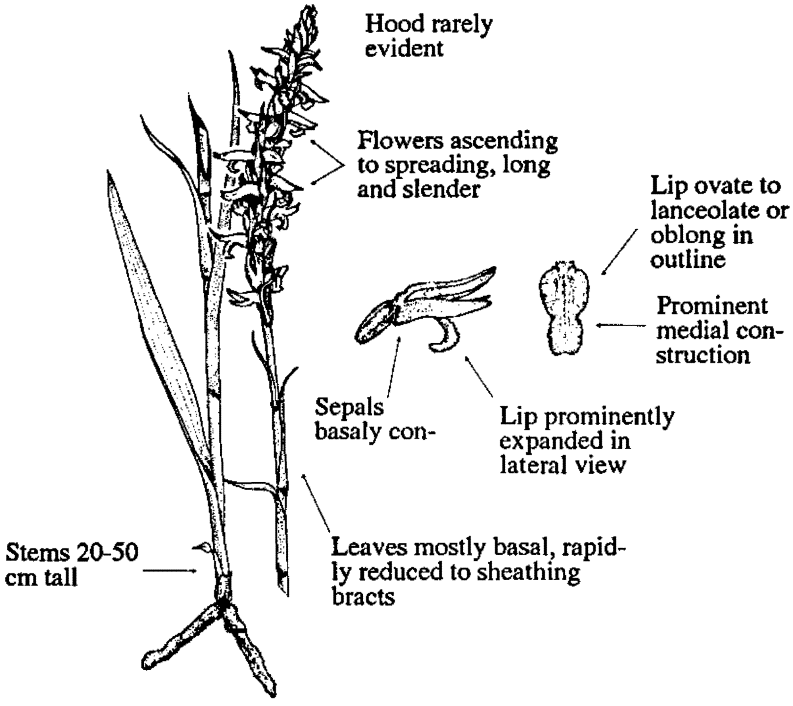
Habitat: Salt desert shrub to the juniper community at 4,790-6,120 feet elevation on the Mancos Shale Formation, April-May.

Look-alikes: Easily separated by its small flowers (2-3.5 cm long) and short spines, but resembling *S. mesae-verde* and *S. whipplei*.

Closeup of Sclerocactus wrightiae by D. Atwood

Habitat of Sclerocactus wrightiae by D. Atwood

Species Distribution


Hood rarely evident
Flowers ascending to spreading, long and slender
Lip ovate to lanceolate or oblong in outline
Prominent medial construction
Sepals basaly con-
Lip prominently expanded in lateral view
Stems 20-50 cm tall
Leaves mostly basal, rapidly reduced to sheathing bracts

SPIRANTHES DILUVIALIS

Scientific Name: *Spiranthes diluvialis* Shev.

Common Name: Ute lady's tresses

Family (Common Name): Orchidaceae (Orchid Family)

Synonyms: None

Global Distribution: Uintah, Garfield, Daggett, Wayne, and Duchesne counties, Utah

Management Responsibility: Dinosaur NM, Capitol Reef NP, Glen Canyon NRA? and BLM-Cedar City, Vernal and Salt Lake Districts, Ashley, Fishlake, Manti-LaSal, and Wasatch-Cache NF's?

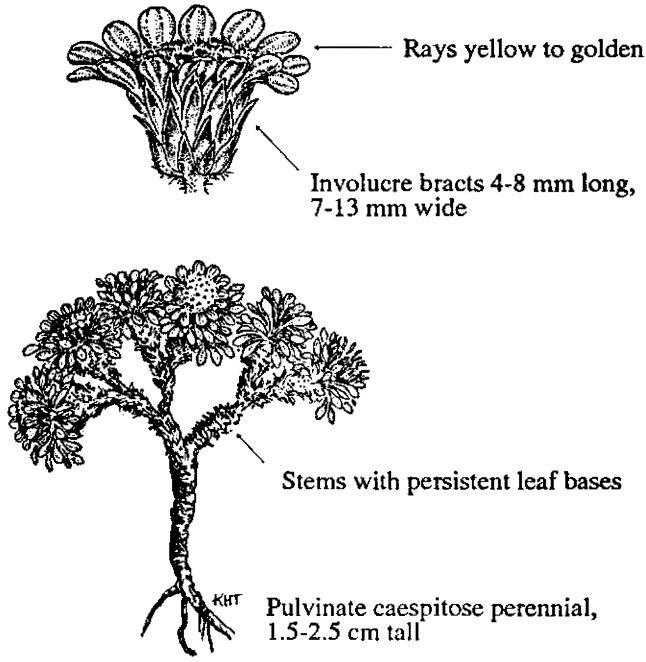
Habitat: Along streams, bogs, and open seepage areas in cottonwood, tamarix, willow and pinyon-juniper communities at 4,400 to 6,810 feet elevation, late July-September.

Look-alikes: Similar to *S. romanzoffiana*, but this species differs in the short flowers that are broad at the base and strongly ascending. The sepals are connate toward the base and the united petals form a hood above the lip. The lip is largely hidden in lateral view with only the reflexed apex exposed.

Habitat of Spiranthes diluvialis by J. Coyner

Closeup of Spiranthes diluvialis by W. Jennings

Species
Distribution


Rays yellow to golden
Involucre bracts 4-8 mm long, 7-13 mm wide
Stems with persistent leaf bases
KHT
Pulvinate caespitose perennial, 1.5-2.5 cm tall

TOWNSENDIA APRICA

Scientific Name: *Townsendia aprica* Welsh & Reveal

Common Name: Last Chance townsendia

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to central Utah in Emery, Wayne and Sevier counties

Management Responsibility: Fishlake NF, BLM-Moab and Richfield Districts, Capitol Reef NP, and State Trust Lands

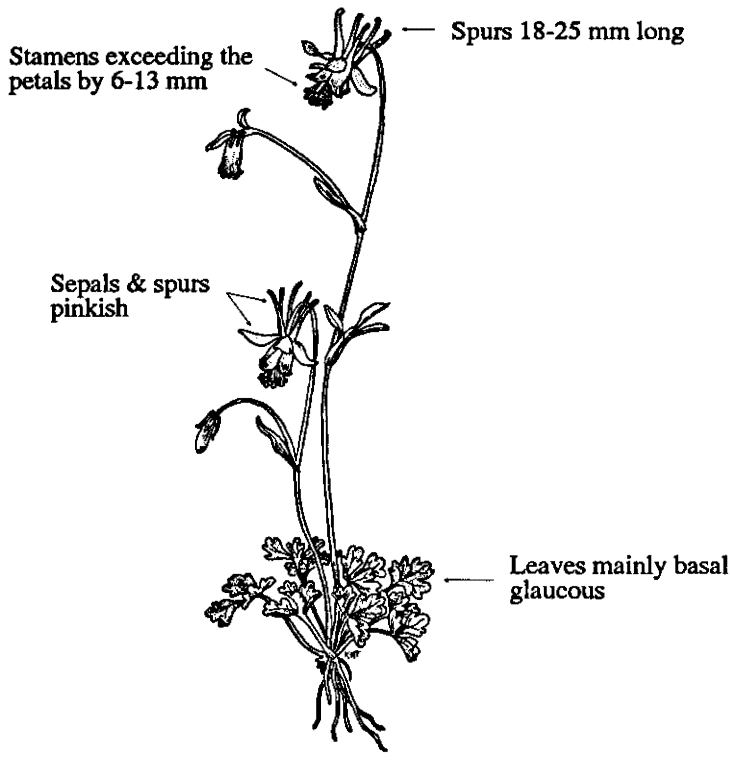
Habitat: Salt desert shrub and pinyon-juniper communities on clay or clay silt soils of the Arapien and Mancos Shale formations between 6,100-8,000 feet elevation, April-May.

Look-alikes: Easily distinguished by its pulvinate caespitose acaulescent habit, yellow rays, and short pappus of ray flowers (0.7-1 mm long).

Closeup of Townsendia aprica by S. Welsh

Habitat of Townsendia aprica by D. Atwood

Species
Distribution



AQUILEGIA BARNEBYI

Scientific Name: *Aquilegia barnebyi* Munz

Common Name: Shale columbine or Barneby columbine

Family (Common Name): Ranunculaceae (Buttercup Family)

Synonyms: None

Global Distribution: Northeastern Utah in Duchesne and Uintah counties and adjacent Colorado

Management Responsibility: Ashley NF and BLM-Vernal District

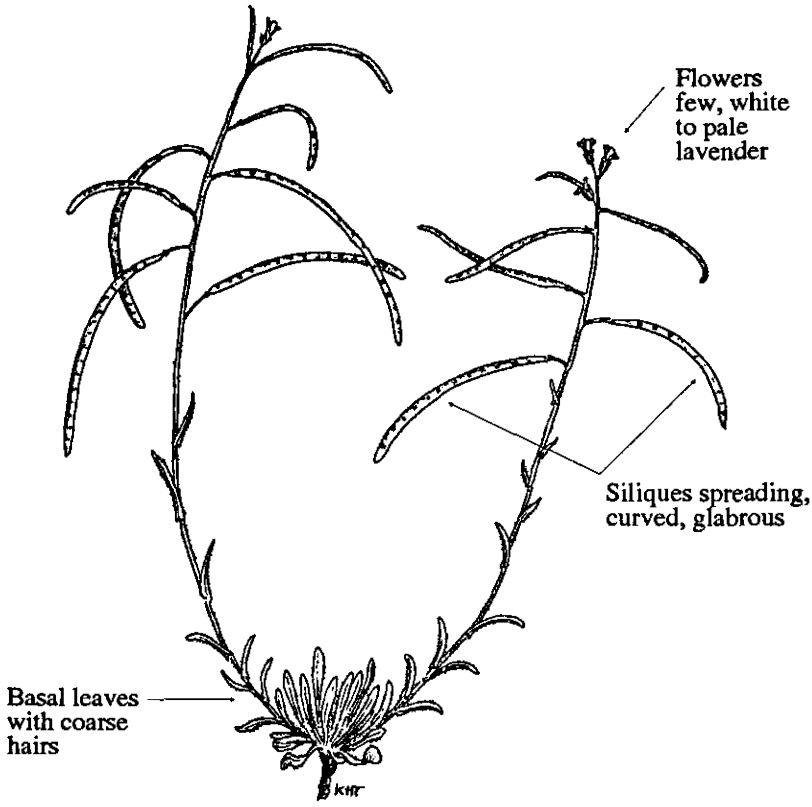
Habitat: Mixed desert shrub, salina wildrye, pinyon-juniper, and Douglas fir communities on the Green River and Uinta formations between 5,495 to 7,400 feet elevation, June-July.

Look-alikes: Related to *A. flavescens* but distinct in having sepals shorter than the spurs and by the shorter tuft of glaucous basal leaves.

Closeup of Aquilegia barnebyi by L. Shultz

Habitat of Aquilegia barnegyi by S. Welsh

Species
Distribution



ARABIS FALCATORIA

Scientific Name: *Arabis falcatoria* Rollins

Common Name: Grouse Creek arabis

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

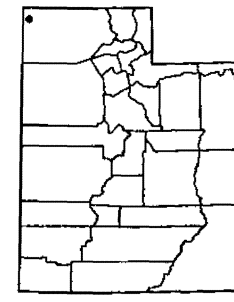
Global Distribution: Box Elder County, Utah and Elko County, Nevada

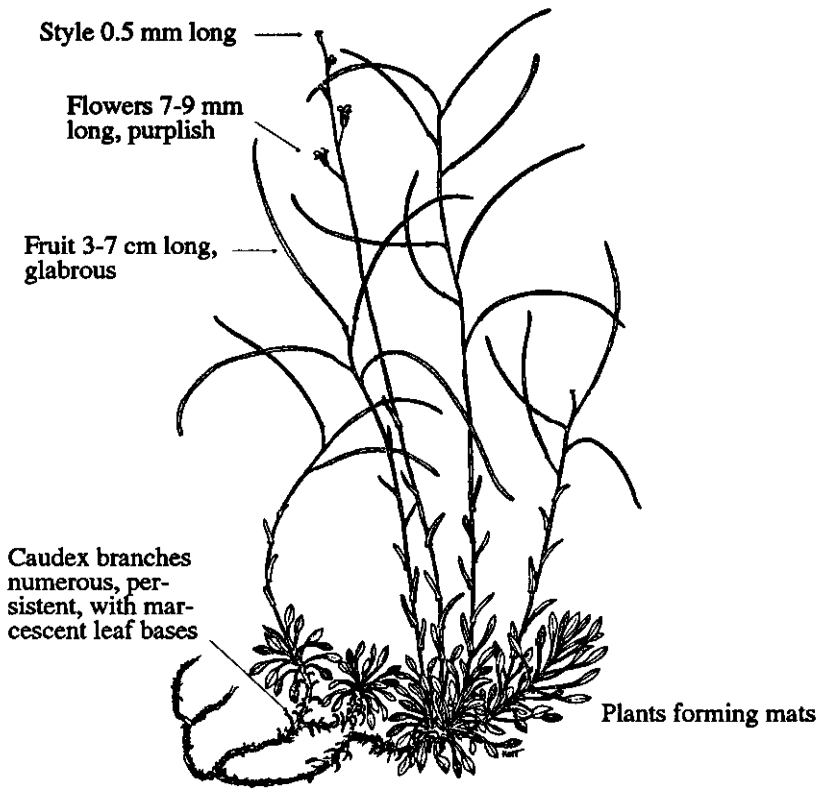
Management Responsibility: BLM-Salt Lake District

Habitat: Ridge summit in chip rock at about 5,500-6,500 feet elevation, June.

Look-alikes: This plant is very similar to both *A. perennans* and *A. demissa.* It is said to differ from the former in the course hairs of basal leaves and from the latter by the coarser hairs on the basal leaves.

Species
Distribution




Style 0.5 mm long
Flowers 7-9 mm long, purplish
Fruit 3-7 cm long, glabrous
Caudex branches numerous, persistent, with marcescent leaf bases
Plants forming mats

ARABIS VIVARIENSIS

Scientific Name: *Arabis vivariensis* Welsh

Common Name: Park rock cress

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

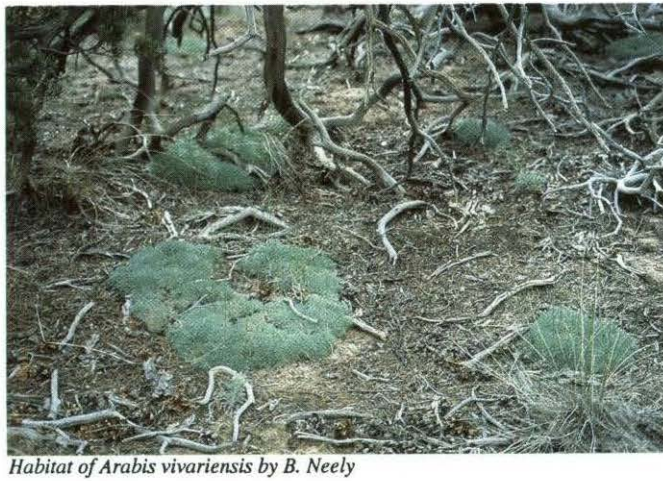
Global Distribution: Endemic to Uintah County, Utah and Moffit County, Colorado

Management Responsibility: Dinosaur NM?, FWS-Jones Hole Fish Hatchery and BLM-Vernal District

Habitat: Limestone and sandstone outcrops in mixed desert shrub and pinyon-juniper communities at 5,000 to 6,000 feet elevation, May.

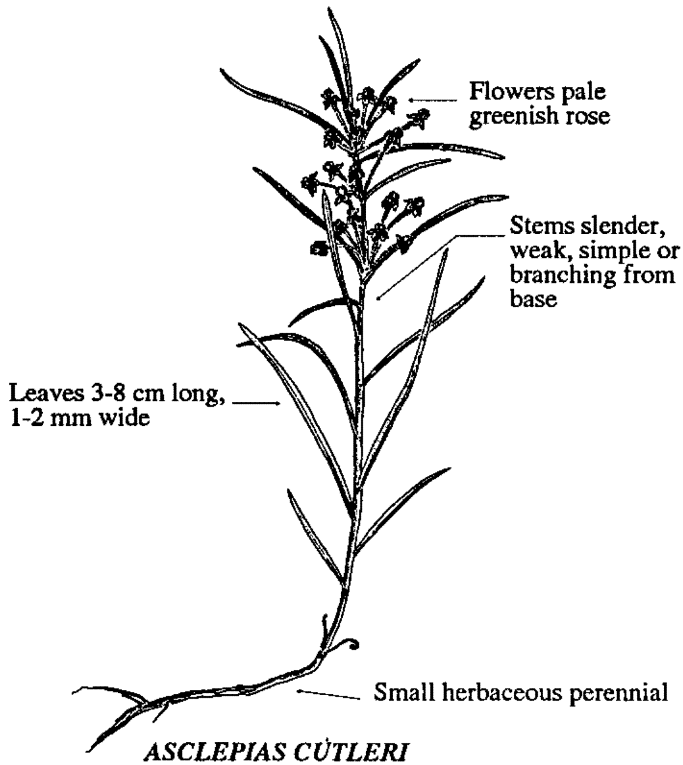
Look-alikes: This plant is close to *A. fernaldiana* Rollins from Nevada, differing from the type variety of that species in smaller flowers and from the species generally in the shorter style.

Closeup of Arabis vivariensis by B. Neely



Habitat of Arabis vivariensis by B. Neely

Species
Distribution


Flowers pale greenish rose
Stems slender, weak, simple or branching from base
Leaves 3-8 cm long, 1-2 mm wide
Small herbaceous perennial

ASCLEPIAS CUTLERI

Scientific Name: *Asclepias cutleri* Woodson

Common Name: Cutler milkweed

Family (Common Name): Asclepiadaceae (Milkweed Family)

Synonyms: None

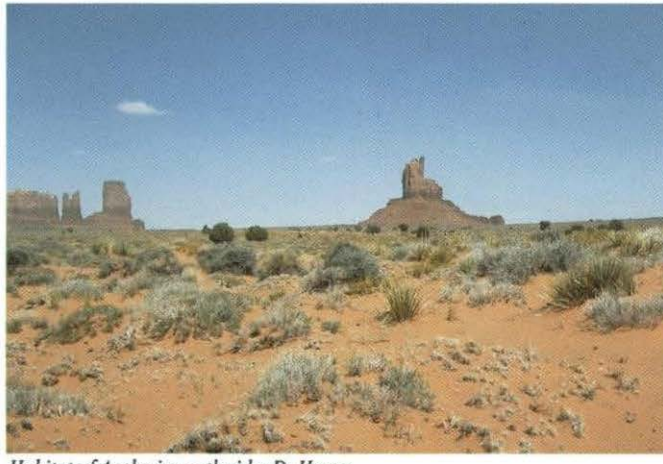
Global Distribution: Southeastern Utah in Grand and San Juan counties; northern Navajo County, Arizona (Navajo Nation)

Management Responsibility: BLM-Moab District, Navajo Nation TL-Teec Nos Pos, Red Mesa, Dennehotso, Mexican Water, Kayenta, and Aneth Chapters, Manti-LaSal NF?, Glen Canyon NRA?, private and State Trust Lands

Habitat: Mixed desert shrub and pinyon-juniper communities on sand dunes and gravelly soils between 4,165 to 4,690 feet elevation, April-May.

Look-alikes: A distinct species of sandy areas recognized by its narrow, linear leaves (1-2 mm wide), pendulous or weakly ascending follicles and puberulent herbage.

Closeup of Asclepias cutleri by D. Atwood



Habitat of Asclepias cutleri by D. House

Species
Distribution

ASPLENIUM ADIANTUM-NIGRUM

Scientific Name: *Asplenium adiantum-nigrum* L.

Common Name: Black spleenwort

Family (Common Name): Polypodiaceae (Fern Family)

Synonyms: *A. andrewsii* A. Nels.

Global Distribution: Disjunct in southwestern Utah in Washington County; Arizona, Colorado, Europe, Asia and Africa

Management Responsibility: Zion NP and BLM-Cedar City District?

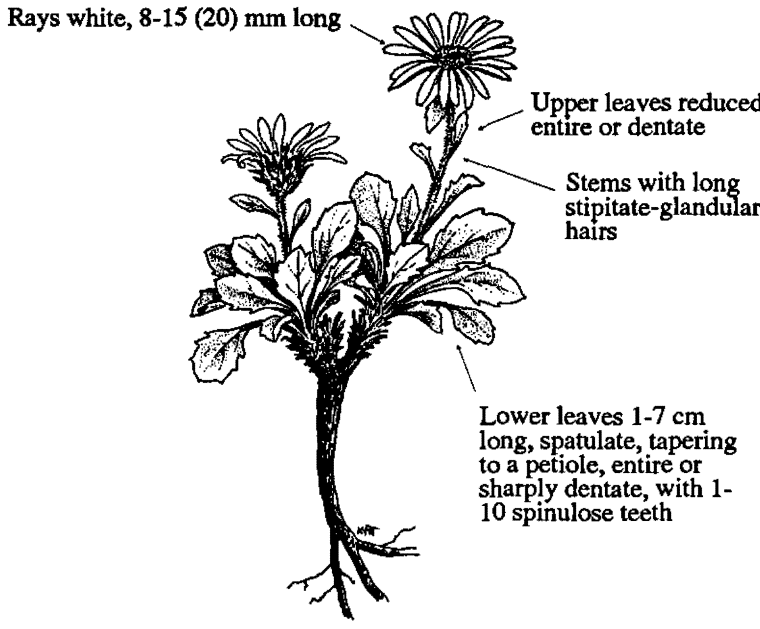
Habitat: Shaded mesic cliffs of the Navajo Sandstone Formation in mountain brush, and ponderosa pine communities at 5,100 feet elevation, May-July.

Look-alikes: May be confused with *A. septentrionale*, but differs in having many pinnae that are not narrowly linear and sori that are not very elongate; and from other *Asplenia* in having bipinnate to tripinnate fronds.

Closeup of Asplenium adiantum-nigrum by W. Jennings

Habitat of Asplenium adiantum-nigrum by K. Snyder

Species
Distribution


Rays white, 8-15 (20) mm long
Upper leaves reduced, entire or dentate
Stems with long stipitate-glandular hairs
Lower leaves 1-7 cm long, spatulate, tapering to a petiole, entire or sharply dentate, with 1-10 spinulose teeth

ASTER KINGII VAR. *BARNEBYANA*

Scientific Name: *Aster kingii* D.C. Eaton var. *barnebyana* (Welsh & Goodrich) Welsh

Common Name: Barneby woody aster

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Machaeranthera kingii* (D.C. Eaton) Cronq. var. *barnebyana* Welsh & Goodrich

Global Distribution: Endemic to Millard and Juab counties in West-central Utah

Management Responsibility: Fishlake NF

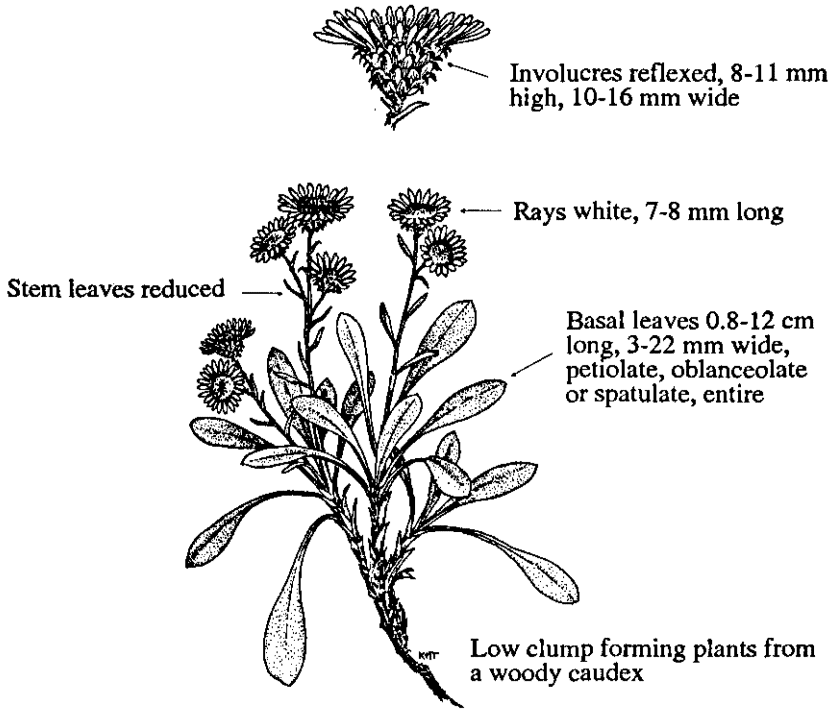
Habitat: Mountain mahogany-oak community on rock outcrops composed of Precambrian quartzite between 7,345 to 7,610 feet elevation, August-September.

Look-alikes: Similar to the typical phase, but differs in having more numerous pronounced spinulose teeth on the leaves and longer viscid-villous multicellular hairs on the stems.

Closeup of Aster kingii var. barnebyana by B. Franklin

Habitat of Aster kingii var. barnebyana by L. Armstrong

Species
Distribution


Involucres reflexed, 8-11 mm high, 10-16 mm wide
Rays white, 7-8 mm long
Stem leaves reduced
Basal leaves 0.8-12 cm long, 3-22 mm wide, petiolate, oblanceolate or spatulate, entire
Low clump forming plants from a woody caudex

ASTER KINGII VAR. *KINGII*

Scientific Name: *Aster kingii* D.C. Eaton var. *kingii*

Common Name: King woody aster

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Machaeranthera kingii* (D. C. Eaton) Cronq. & Keck

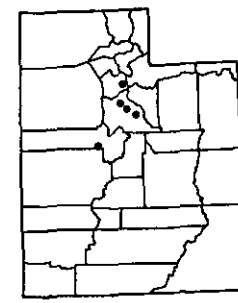
Global Distribution: A Wasatch Plateau endemic in Juab, Salt Lake, and Utah counties

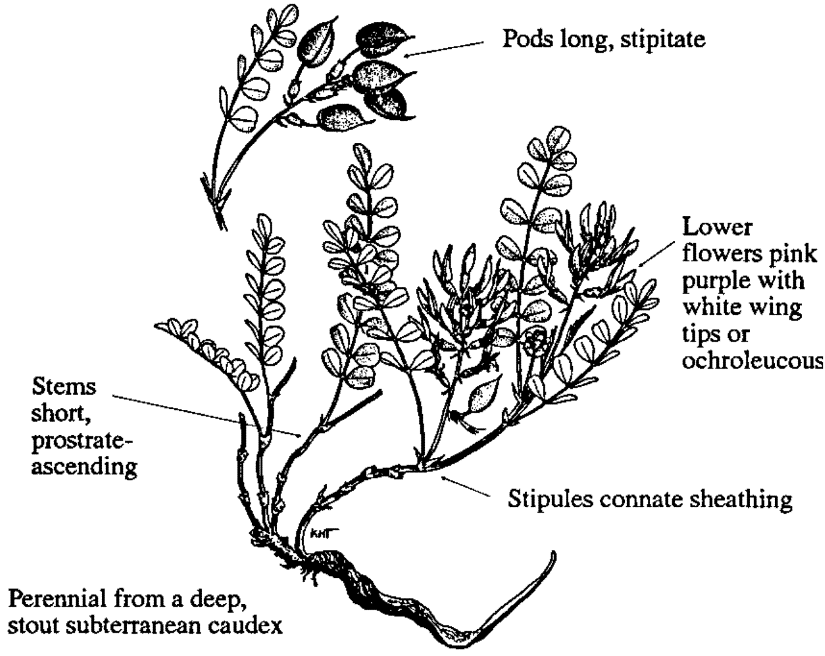
Management Responsibility: Uinta and Wasatch-Cache NF's, Timp Cave NM and private

Habitat: Alpine and Douglas fir-white fir communities in crevices of limestone and dolomite parent materials between 6,600 to 11,700 feet elevation, July-August.

Look-alikes: Close to var. *barnebyana*, but different in having stipitate-glands only on the upper part of the inflorescence and less numerous pronounced spinulose teeth on the leaves.

Species
Distribution




Pods long, stipitate
Lower flowers pink purple with white wing tips or ochroleucous
Stems short, prostrate-ascending
Stipules connate sheathing
Perennial from a deep, stout subterranean caudex

ASTRAGALUS AMPULLARIUS

Scientific Name: *Astragallus ampullarius* Wats.

Common Name: Gumbo milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Tragacantha ampullaria* (Wats.) Kuntze; *Phaca ampullaria* (Wats.) Rydb.

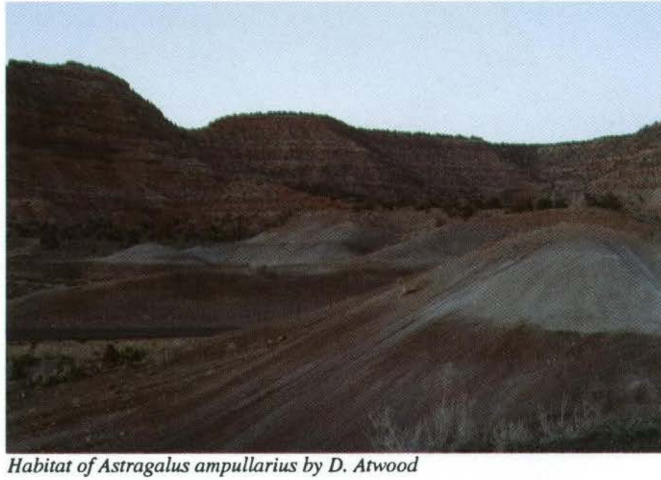
Global Distribution: Restricted to Kane and Washington counties, Utah and Mohave and Coconino counties, Arizona

Management Responsibility: BLM-Cedar City and Arizona Strip Districts, private, and Paiute TL

Habitat: Clay soils of the Chinle and Tropic (?) Shale formations at 3,180 to 5,415 feet elevation, April-May.

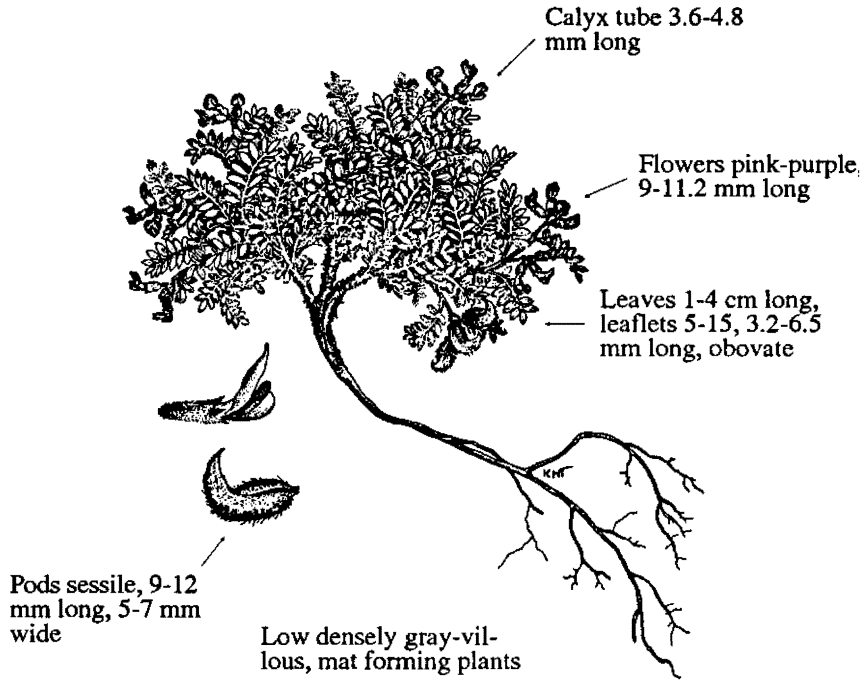
Look-alikes: The hypogeous caudex and short, prostrate-ascending stems, which persist in rosette form with marcescent stems and pods of previous years circular-reclining, bleached and skeleton-like, are quite unlike any of the taxa within the region. Phases of *A. eremiticus*, q.v., with inflated ovoid-oblong pods resemble *A. ampullarius,* but the caudex is typically superficial, the stipules are all distinct, and the stems commonly are erect (except in *A. eremiticus* var. *ampullarioides* q.v.).

Closeup of Astragalus ampullaris by D. Atwood



Habitat of Astragalus ampullarius by D. Atwood

Species
Distribution


Calyx tube 3.6-4.8 mm long
Flowers pink-purple, 9-11.2 mm long
Leaves 1-4 cm long, leaflets 5-15, 3.2-6.5 mm long, obovate
Pods sessile, 9-12 mm long, 5-7 mm wide
Low densely gray-villous, mat forming plants

ASTRAGALUS ANSERINUS

Scientific Name: *Astragalus anserinus* Atwood, Goodrich, & Welsh

Common Name: Goose Creek milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

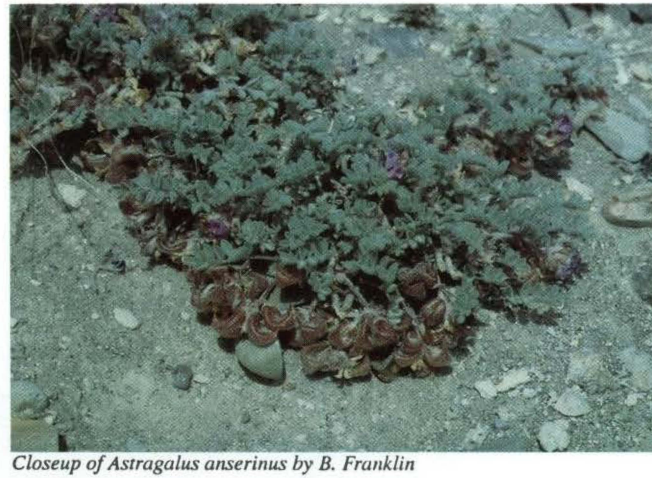
Synonyms: None

Global Distribution: Endemic to the Goose Creek drainage Box Elder County, Utah; Nevada and Idaho

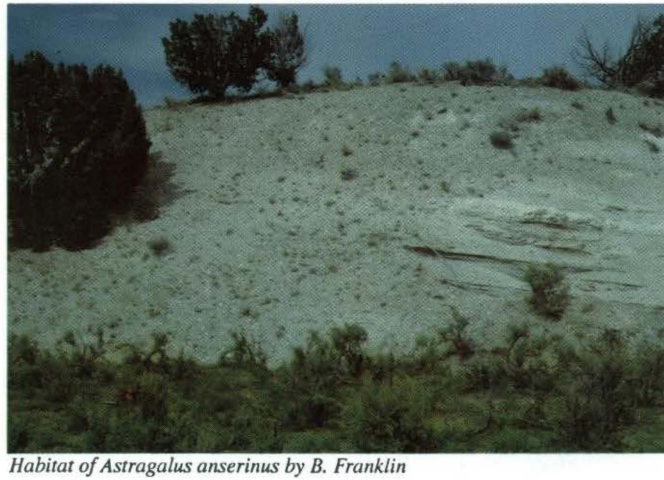
Management Responsibility: BLM-Salt Lake and Burley Districts, Sawtooth NF (Idaho) and private

Habitat: White tuffaceous outcrops in sagebrush, rabbitbrush and juniper communities at 5,000 to 5,220 feet, May-June.

Look-alikes: Similar to some forms of *A. purshii*, but having pink-purple flowers 9-11.2 mm long, stramineous pods with the valves apparent through the pubescence and short acaulescent habit.

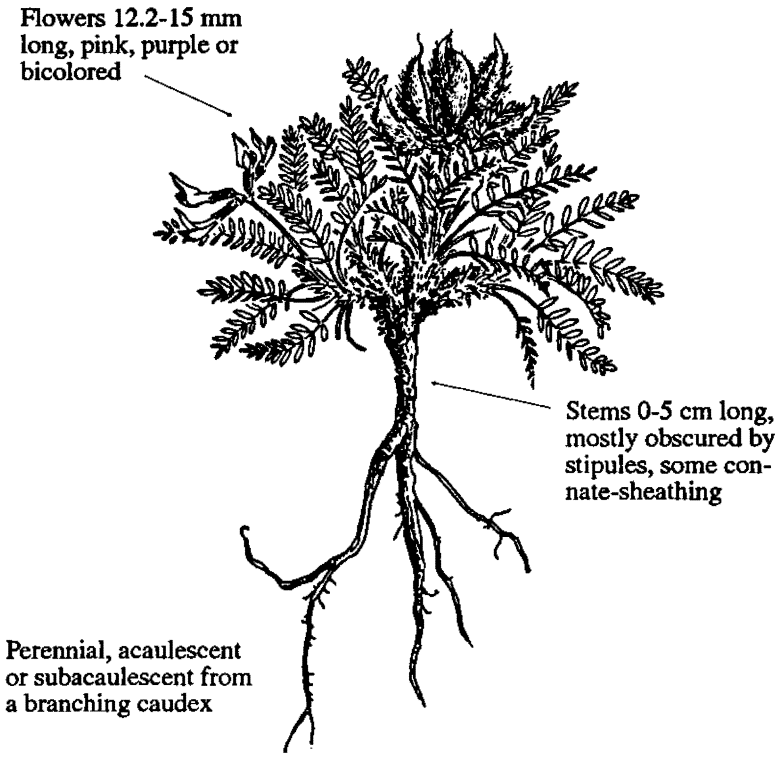


Closeup of Astragalus anserinus by B. Franklin



Habitat of Astragalus anserinus by B. Franklin

Species
Distribution


Flowers 12.2-15 mm long, pink, purple or bicolored
Stems 0-5 cm long, mostly obscured by stipules, some connate-sheathing
Perennial, acaulescent or subacaulescent from a branching caudex

ASTRAGALUS BARNEBYI

Scientific Name: *Astagalus barnebyi* Welsh & Atwood

Common Name: Barneby milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Astragalus desperatus* var. *conspectus* Barneby

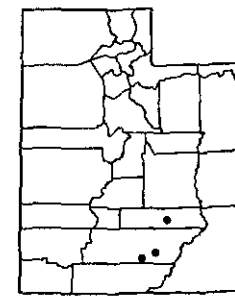
Global Distribution: Restricted to eastern Garfield and Wayne counties, Utah; Navajo County, Arizona

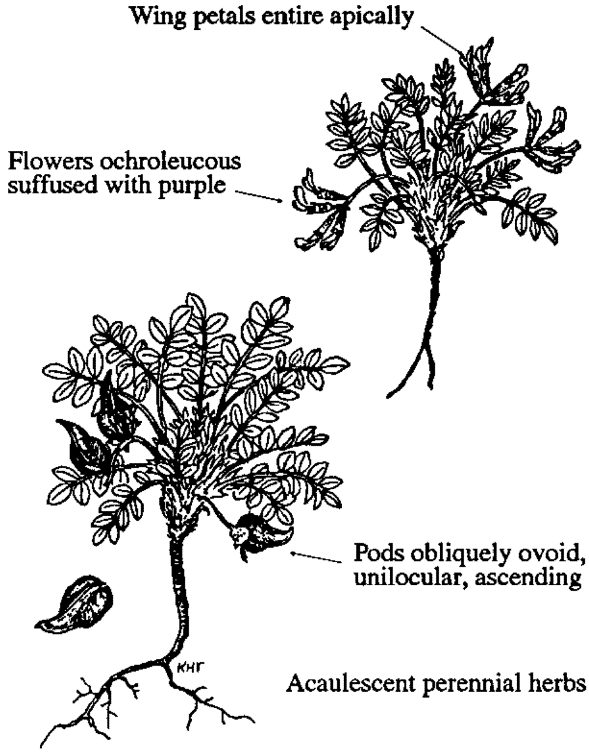
Management Responsibility: BLM-Richfield District

Habitat: Pinyon-juniper woods and mixed desert shrublands on platy shales of the Carmel or on sandstones of Jurassic and Cretaceous ages at 4,690 to 6,005 feet elevation, late April-mid-June.

Look-alikes: Barneby milkvetch is a near congener of *A. desperatus*, q.v., from which it differs in the larger size of flowers and parts and in the usually more compact habit of growth.

Species
Distribution





ASTRAGALUS CONSOBRINUS

Scientific Name: *Astragalus consobrinus* (Barneby) Welsh

Common Name: Bicknell milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Astragalus castaneiformis* S. Wats. var. *consobrinus* Barneby

Global Distribution: Restricted from central to south-central Utah in Sevier, Wayne, Piute, Garfield, and Emery counties

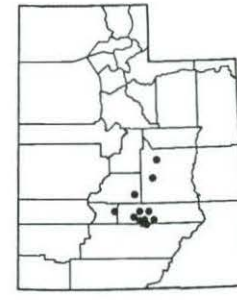
Management Responsibility: Fishlake NF, Capitol Reef NP, BLM-Moab and Richfield District, and State Trust Lands

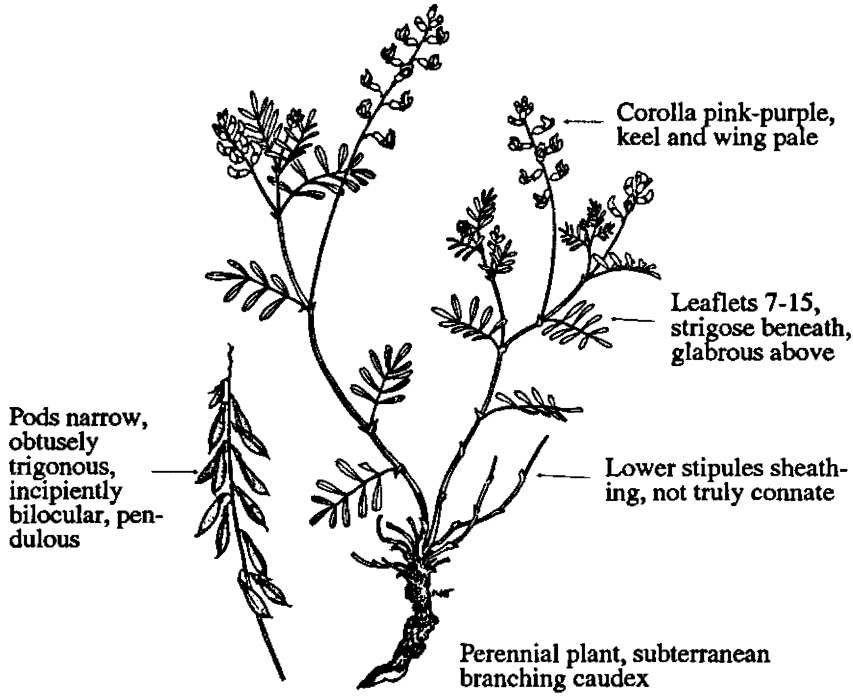
Habitat: Sagebrush-grassland and pinyon-juniper communities on the Mancos Shale Formation, volcanic gravel, open gravelly or sandy knolls, and barren stony hillsides between 5,200 to 9,000 feet elevation, May-July.

Look-alikes: Resembles *A. castaneiformis, A. chamaeleuce,* and *A. cymboides,* but distinct from these in the broadly deltate beak which is half as long as the body, and by habitat and distribution.

Closeup of Astragalus consobrinus by S. Welsh

Species
Distribution




Corolla pink-purple, keel and wing pale
Leaflets 7-15, strigose beneath, glabrous above
Pods narrow, obtusely trigonous, incipiently bilocular, pendulous
Lower stipules sheathing, not truly connate
Perennial plant, subterranean branching caudex

ASTRAGALUS CRONQUISTII

Scientific Name: *Astragalus cronquistii* Barneby

Common Name: Cronquist milkvetch

Family (Common Name): Fabaceae or Leguminosae (Legume Family)

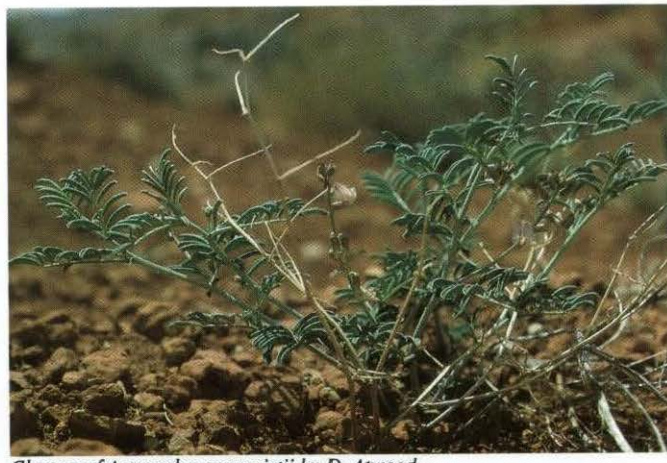
Synonyms: None

Global Distribution: San Juan County, Utah; Montezuma County, Colorado

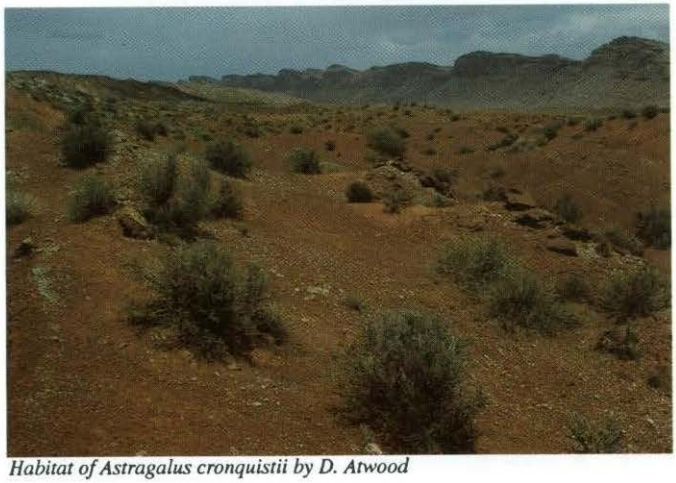
Management Responsibility: BLM-Moab District and Navajo Nation TL-Aneth Chapter

Habitat: Salt desert shrub and blackbrush communities on the Cutler and Morrison Formations at 4,750 to 5,000 feet elevation, late April-June.

Look-alikes: Resembling *A. fucatus,* but differing in the sheathing, not truly connate lower stipules and the narrow, obtusely trigonous incipiently bilocular pod vs unilocular mottled pods in *A. fucatus.*

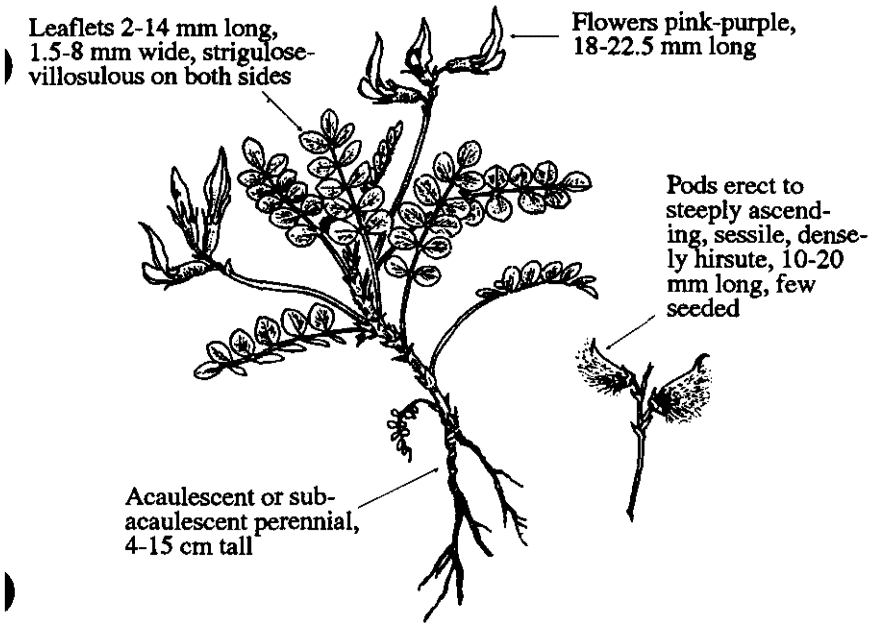


Closeup of Astragalus cronquistii by D. Atwood



Habitat of Astragalus cronquistii by D. Atwood

Species Distribution


Leaflets 2-14 mm long, 1.5-8 mm wide, strigulose-villosulous on both sides
Flowers pink-purple, 18-22.5 mm long
Pods erect to steeply ascending, sessile, densely hirsute, 10-20 mm long, few seeded
Acaulescent or subacaulescent perennial, 4-15 cm tall

ASTRAGALUS DESERETICUS

Scientific Name: *Astragalus desereticus* Barneby

Common Name: Deseret milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

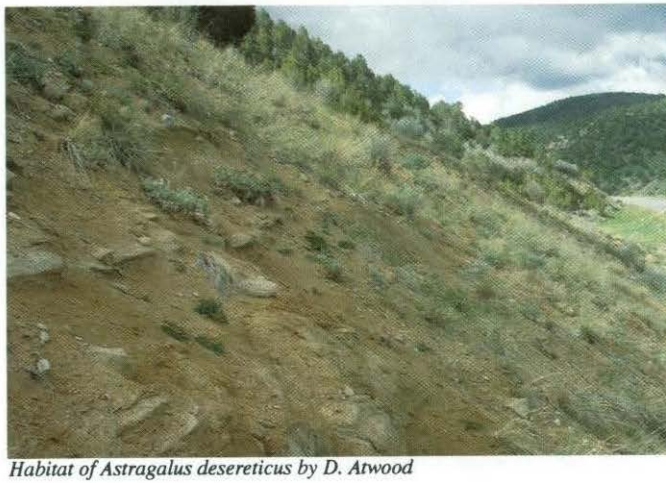
Global Distribution: Endemic to Central Utah in Utah County

Management Responsibility: Mostly private, UDOT, and State

Habitat: Mixed sagebrush-mountain brush-juniper community on red conglomerate and sandy areas between 5,000 to 6,000 feet elevation, May-early June.

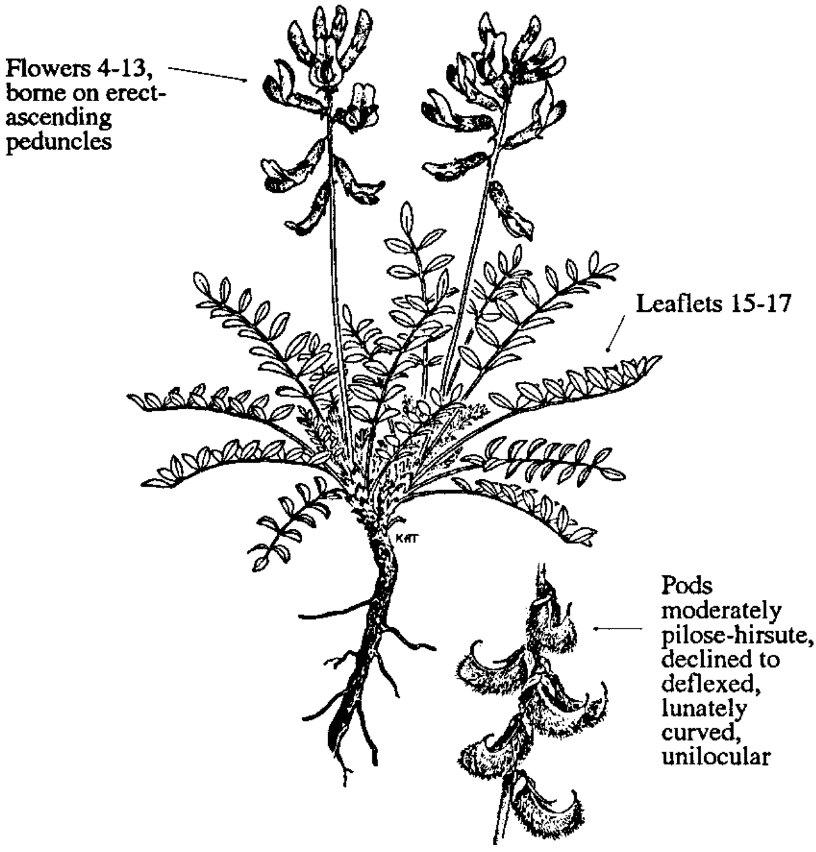
Look-alikes: Close to *A. piutensis*, but differs in the looser pubescence, more strongly graduated petals; from *A. purshii* and *A. argophyllus* by the stiff erect peduncles.

Closeup of Astragalus desereticus by D. Atwood



Habitat of Astragalus desereticus by D. Atwood

Species Distribution


Flowers 4-13, borne on erect-ascending peduncles
Leaflets 15-17
Pods moderately pilose-hirsute, declined to deflexed, lunately curved, unilocular

ASTRAGALUS EQUISOLENSIS

Scientific Name: *Astragalus equisolensis* Neese & Welsh

Common Name: Horseshoe milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Astragalus desperatus* var. *neeseae* Barneby

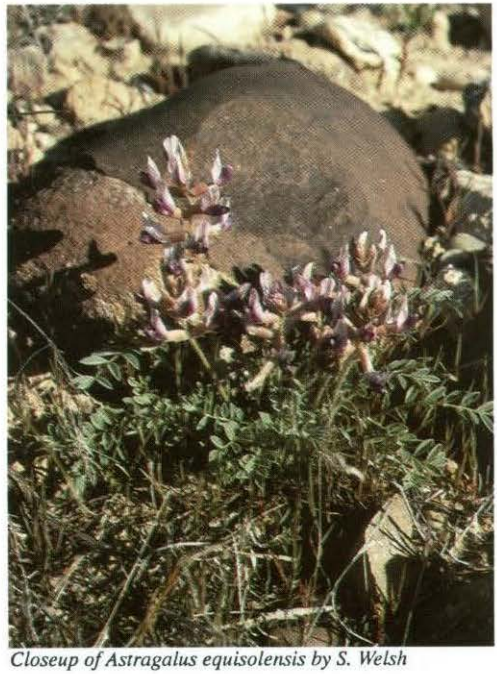
Global Distribution: Restricted to Uintah County, Utah

Management Responsibility: BLM-Vernal District

Habitat: Sagebrush, shadscale, horsebrush, and other mixed desert shrub communities on the Duchesne River Formation at 4,790 to 5,185 feet elevtion, May-early June.

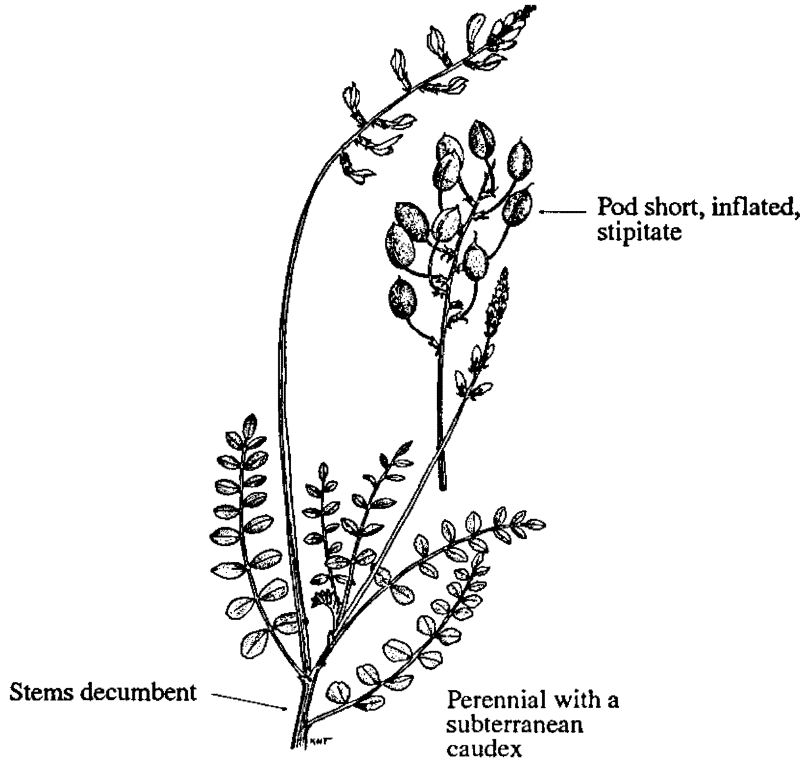
Look-alikes: None in the Unita Basin

Habitat of Astragalus equisolensis by S. Welsh



Closeup of Astragalus equisolensis by S. Welsh

Species
Distribution



ASTRAGALUS EREMITICUS VAR. *AMPULLARIOIDES*

Scientific Name: *Astragalus eremiticus* Sheld. var. *ampullarioides* Welsh

Common Name: Shem milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

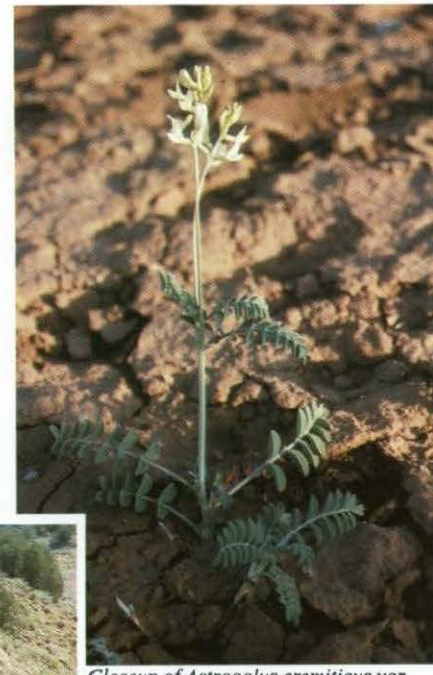
Synonyms: None

Global Distribution: Endemic to the Shem area of Washington County, Utah

Management Responsibility: BLM-Cedar City District? and Paiute Indian Tribe of Utah-Shivwit Band

Habitat: Endemic to the Chinle Formation, 3,450 feet elevation, in scattered juniper and desert shrub communities, May.

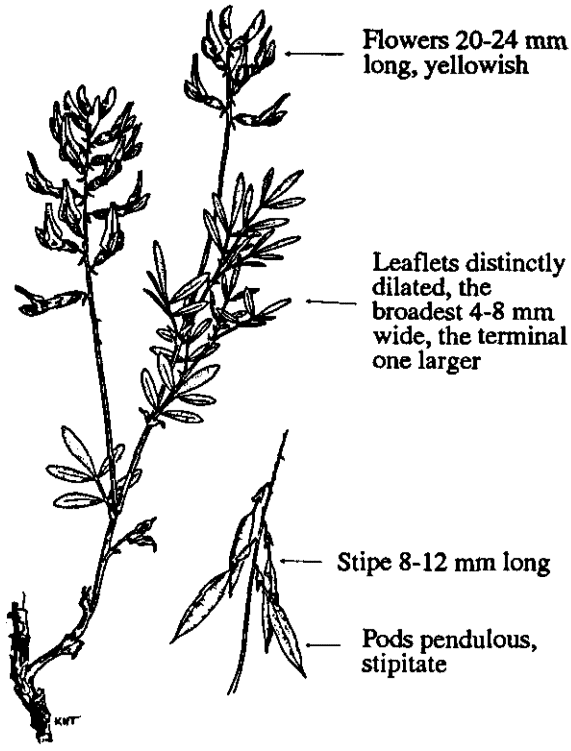
Look-alikes: Resembling *A. ampullarius,* but differing by the proportionately shorter, inflated pod bodies, decumbent stems and subterranean caudex.



Closeup of Astragalus eremiticus var. ampullarioides by D. Atwood

Habitat of Astragalus eremiticus var. ampullarioides by D. Atwood

Species Distribution


Flowers 20-24 mm long, yellowish
Leaflets distinctly dilated, the broadest 4-8 mm wide, the terminal one larger
Stipe 8-12 mm long
Pods pendulous, stipitate

ASTRAGALUS HAMILTONII

Scientific Name: *Astragalus hamiltonii* C.L. Porter

Common Name: Hamilton milkvetch

Family (Common Name): Fabaceae or Leguminosae (Legume Family)

Synonyms: *A. lonchocarpus* Torr. var. *hamiltonii* (C.L. Porter) Isley

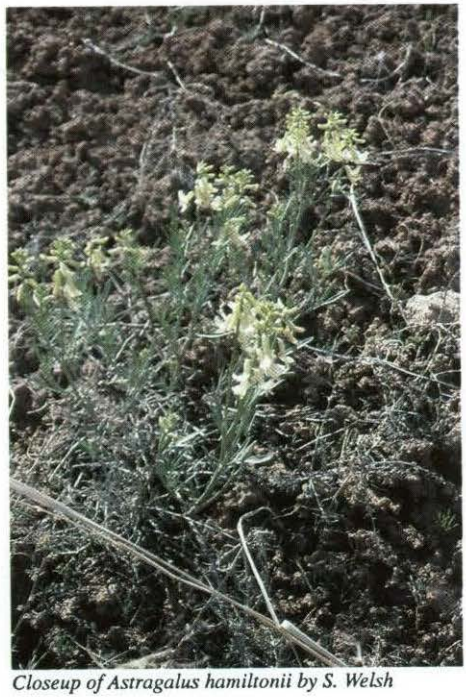
Global Distribution: A Uinta Basin endemic in Uintah County, Utah

Management Responsibility: BLM-Vernal District, Dinosaur NM, State Trust Lands, Ute TL-North Unit and private

Habitat: Duchesne River and Wasatch Formations at 5,240 to 5,800 feet elevation in pinyon-juniper and desert shrub communities, May-June.

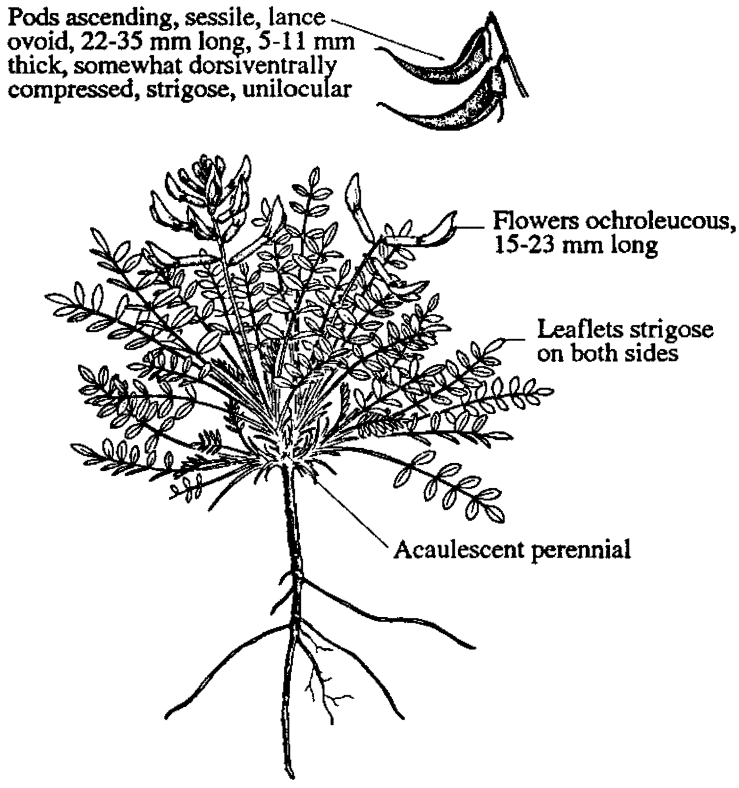
Look-alikes: Very close to *A. lonchocarpus*, but having distinct dilated leaflets, the broadest 4-8 mm wide, and the species geographically isolated.

Habitat of Astragalus hamiltonii by S. Welsh



Closeup of Astragalus hamiltonii by S. Welsh

Species
Distribution


Pods ascending, sessile, lance ovoid, 22-35 mm long, 5-11 mm thick, somewhat dorsiventrally compressed, strigose, unilocular
Flowers ochroleucous, 15-23 mm long
Leaflets strigose on both sides
Acaulescent perennial

ASTRAGALUS HENRIMONTANENSIS

Scientific Name: *Astragalus henrimontanensis* Welsh

Common Name: Dana milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Astragalus stocksii* Welsh, *Astragalus argophyllus* Nutt. var. *stocksii* Barneby ex Isley

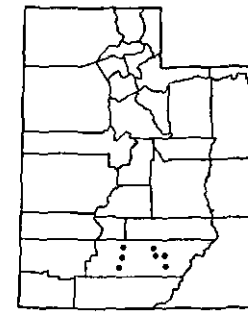
Global Distribution: Endemic to South-central Utah in Garfield County

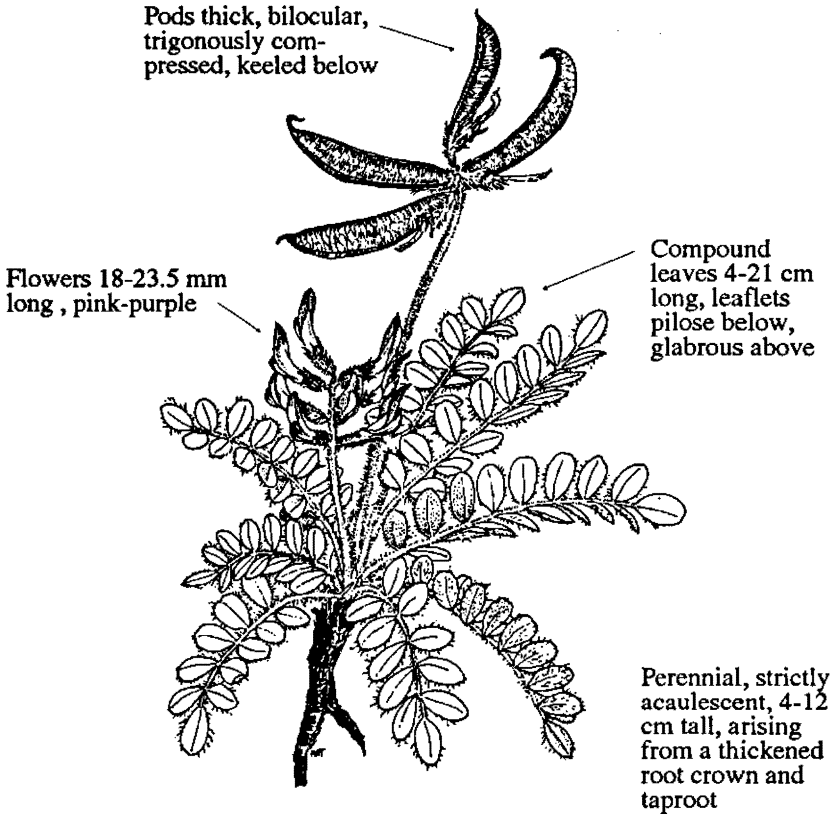
Management Responsibility: BLM-Richfield District, Dixie NF, private and State Trust Lands?

Habitat: Ponderosa pine, pinyon-juniper, and sagebrush communities on gravelly loam soil, 7,000 to 9,200 feet elevation, April-May.

Look-alikes: Similar to *A. argophyllus* and *A. eurekensis*, but differing as noted above.

Species
Distribution




Pods thick, bilocular, trigonously compressed, keeled below
Flowers 18-23.5 mm long , pink-purple
Compound leaves 4-21 cm long, leaflets pilose below, glabrous above
Perennial, strictly acaulescent, 4-12 cm tall, arising from a thickened root crown and taproot

ASTRAGALUS HOLMGRENIORUM

Scientific Name: *Astragalus holmgreniorum* Barneby

Common Name: Holmgren milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Washington County, Utah and Mohave County, Arizona; a Virgin-Mohave endemic

Management Responsibility: BLM-Cedar City and Arizona Strip Districts and private

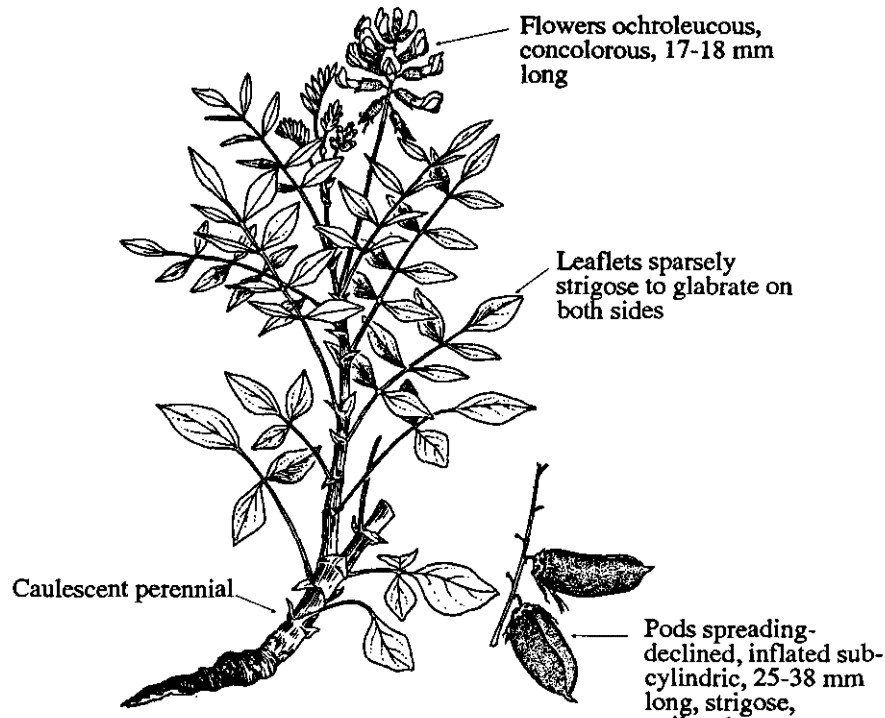
Habitat: Warm desert shrub communities at approximately 2,690 to 2,780 feet elevation, April-May.

Look-alikes: None

Closeup of Astragalus holmgreniorum by D. Atwood

Habitat of Astragalus holmgreniorum by K. Harper

Species
Distribution


Flowers ochroleucous, concolorous, 17-18 mm long
Leaflets sparsely strigose to glabrate on both sides
Caulescent perennial
Pods spreading-declined, inflated sub-cylindric, 25-38 mm long, strigose, unilocular

ASTRAGALUS ISELYI

Scientific Name: *Astragalus iselyi* Welsh

Common Name: Isely milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

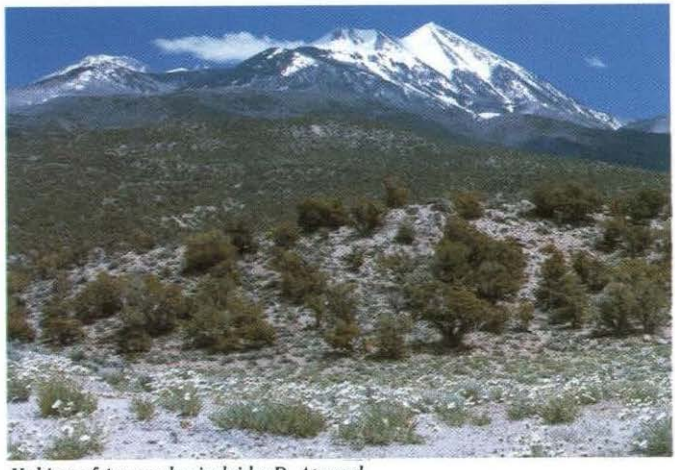
Global Distribution: Endemic to Utah in Grand and San Juan counties

Management Responsibility: BLM-Moab District, Manti-LaSal NF, and State

Habitat: Pinyon-juniper and desert shrub communities on seleniferous and gypsiferous clays of the Morrison and Paradox formations between 4,755 to 6,000 feet elevation, March-May.

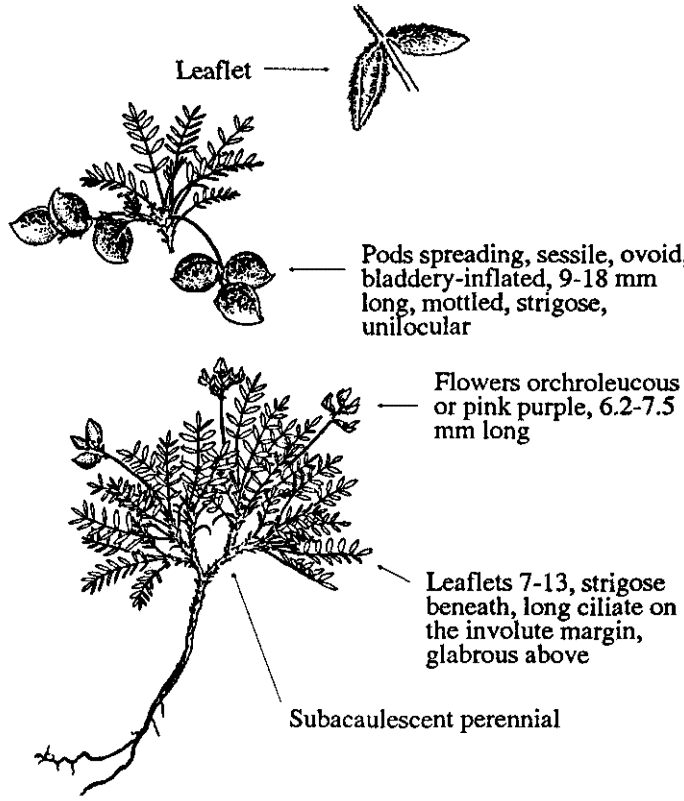
Look-alikes: Similar to *A. sabulosus*, but differing in the smaller white flowers (17-18 mm long vs 27-34 in *A. sabulosus*).

Closeup of Astragalus iselyi by D. Atwood



Habitat of Astragalus iselyi by D. Atwood

Species
Distribution


Leaflet
Pods spreading, sessile, ovoid, bladdery-inflated, 9-18 mm long, mottled, strigose, unilocular
Flowers orchroleucous or pink purple, 6.2-7.5 mm long
Leaflets 7-13, strigose beneath, long ciliate on the involute margin, glabrous above
Subacaulescent perennial

ASTRAGALUS LIMNOCHARIS VAR. *LIMNOCHARIS*

Scientific Name: *Astragalus limnocharis* Barneby var. *limnocharis*

Common Name: Navajo Lake milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

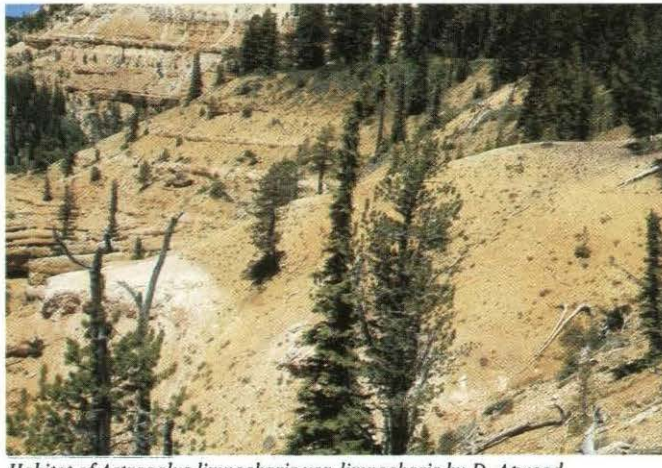
Global Distribution: Endemic to southwestern Utah in Garfield, Iron, and Kane counties

Management Responsibility: Dixie NF, Cedar Breaks NM, Bryce Canyon NP and private

Habitat: Herbaceous community with scattered bristlecone pine on the Wasatch Limestone Formation between 8,800 to 10,500 feet elevation, July-September.

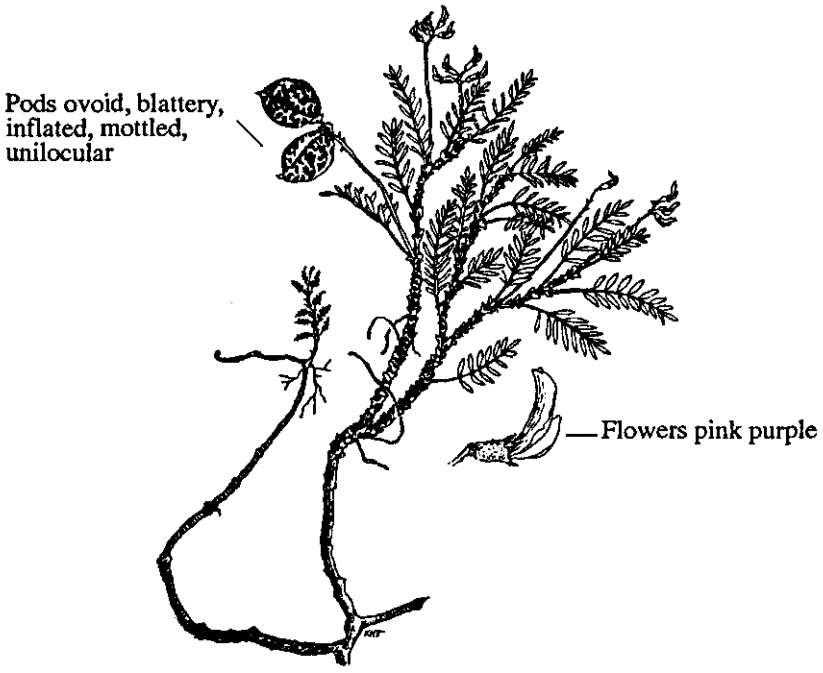
Look-alikes: Similar to var. *tabulaeus* and *A. montii,* but differing from them in the whitish flowers and the ciliolate spreading hairs of the leaf margins; and from *A. jejunus* in the loosely spreading bidentate stipule-sheaths, and short beaked pod.

Closeup of Astragalus limnocharis var. limnocharis by D. Atwood



Habitat of Astragalus limnocharis var. limnocharis by D. Atwood

Species
Distribution



Plants soboliferous

ASTRAGALUS LIMNOCHARIS VAR. *TABULAEUS*

Scientific Name: *Astragalus limnocharis* Barneby var. *tabulaeus* Welsh

Common Name: Table Cliff milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Endemic to South-central Utah in Garfield County

Management Responsibility: Dixie NF

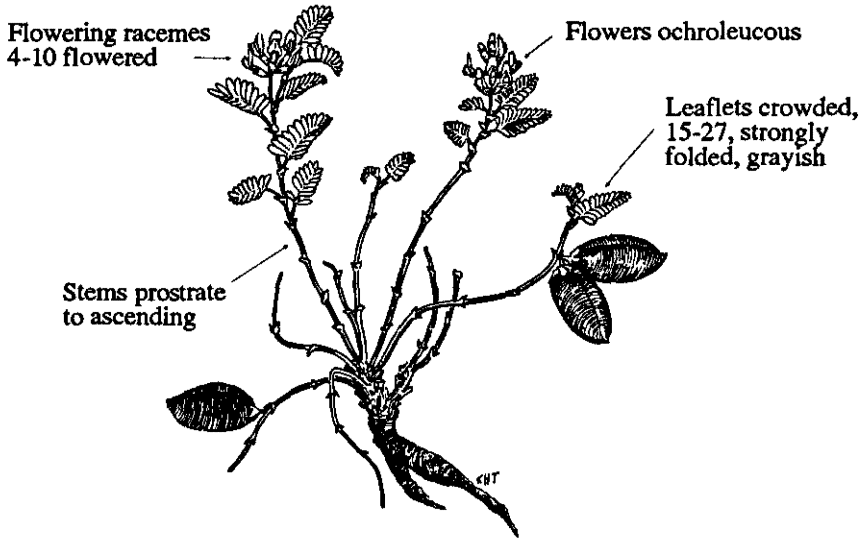
Habitat: Steep, unstable limestone slopes on the pink member of the Wasatch Limestone Formation, 9,200-10,170 feet elevation, June-August.

Look-alikes: Closely resembling var. *limnocharis,* but differing in the pink-purple flowers and soboliferous stems.

Closeup of Astragalus limnocharis var. tabulaeus by D. Atwood

Habitat of Astragalus limnocharis var. tabulaeus by D. Atwood

Species
Distribution



ASTRAGALUS LUTOSUS

Scientific Name: *Astragalus lutosus* Jones

Common Name: Dragon milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

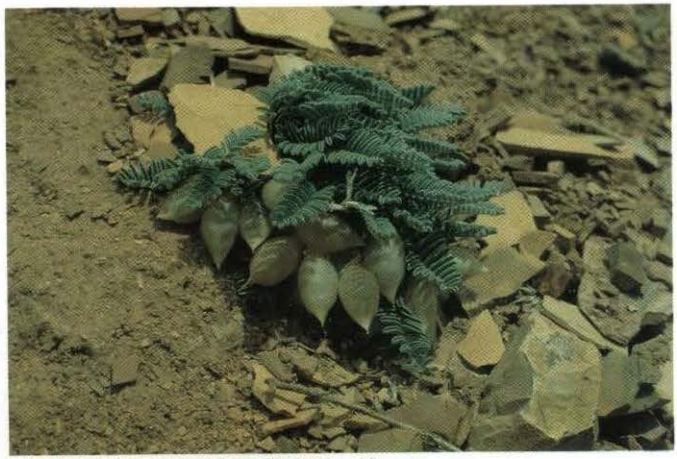
Synonyms: None

Global Distribution: Eastern Uintah County, Utah and Rio Blanco and Garfield counties, Colorado; and disjunct in Wasatch and Utah counties, Utah

Management Responsibility: Uinta and Ashley? NF, BLM-Vernal and Craig Districts, State Trust Lands and private

Habitat: Barren shale knolls and bluffs in the shadscale, desert shrub, and pinyon-juniper communities on the Green River Formation between 5,150 to 9,415 feet elevation, May-August.

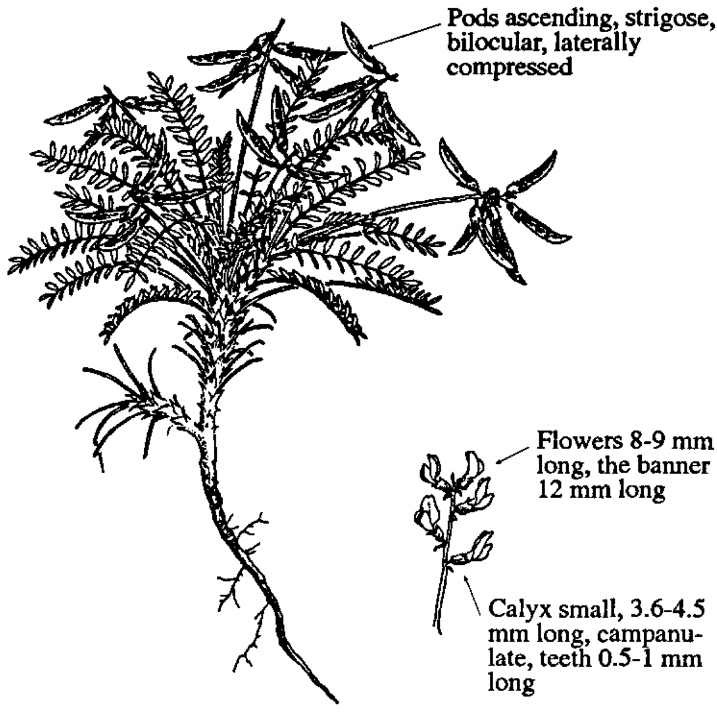
Look-alikes: Easily distinguished by its pallid foliage, few whitish flowers, ellipsoid bladdery inflated unilocular pods and subterranean root-crown.



Closeup of Astragalus lutosus by B. Franklin

Habitat of Astragalus lutosus by D. Atwood

Species
Distribution


Pods ascending, strigose, bilocular, laterally compressed
Flowers 8-9 mm long, the banner 12 mm long
Calyx small, 3.6-4.5 mm long, campanulate, teeth 0.5-1 mm long

ASTRAGALUS MONUMENTALIS

Scientific Name: *Astagalus monumentalis* Barneby

Common Name: Moniment milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Endemic to the Colorado and San Juan drainages in E. Garfield, and San Juan counties, Utah, N. Navajo County, Arizona (Navajo Nation) and San Juan County, Mew Mexico

Management Responsibility: BLM-Moab, Cedar City and Richfield Districts, Navajo Nation TL-Kayenta, Olifato and Dennehotso Chapters, Glen Canyon NRA, Canyonlands? NP, Manti-LaSal NF and State Trust Lands

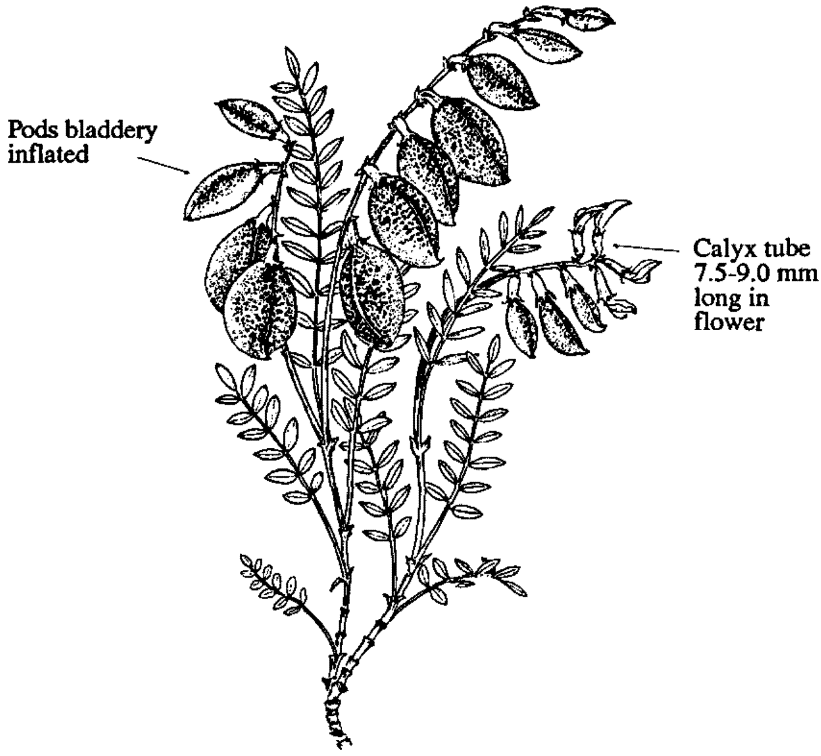
Habitat: Pinyon-juniper and desert shrub communities, crevices in rimrock and ither slickrock sites between 3,770 to 6,230 feet elevation, May-June.

Look-alikes: Similar to *A. cottamii*, but differing in the smaller flower parts (calyx-tubbe campanulate, 3-4.5 mm long, banner 7-10.5 mm long, keel 5-8.5 mm long, and the pods 12-17 mm long).

Closeup of Astragalus monumentalis by D. Atwood

Habitat of Astragalus monumentalis by D. Atwood

Species
Distribution



ASTRAGALUS OOPHORUS VAR. *LONCHOCALYX*

Scientific Name: *Astragalus oophorus* var. *lonchocalyx* Barneby

Common Name: Pink egg milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

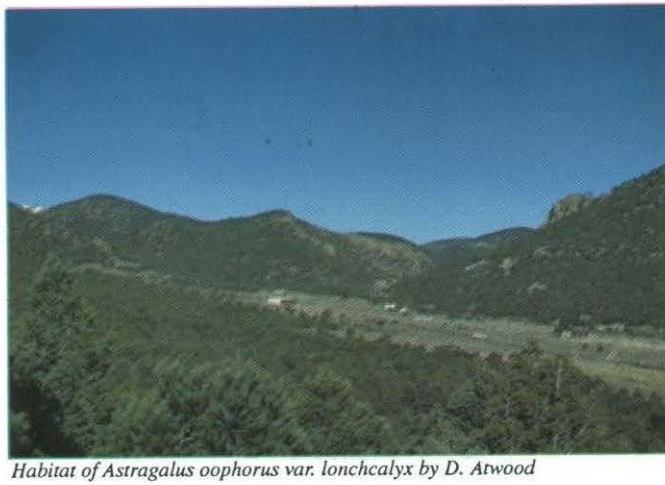
Global Distribution: Western Iron and Beaver counties; Lincoln County, Nevada; a Great Basin endemic

Management Responsibility: BLM-Cedar City District

Habitat: Pinyon-juniper, sagebrush, and mixed desert shrub communities at 5,800 to 7,545 feet elevation, May.

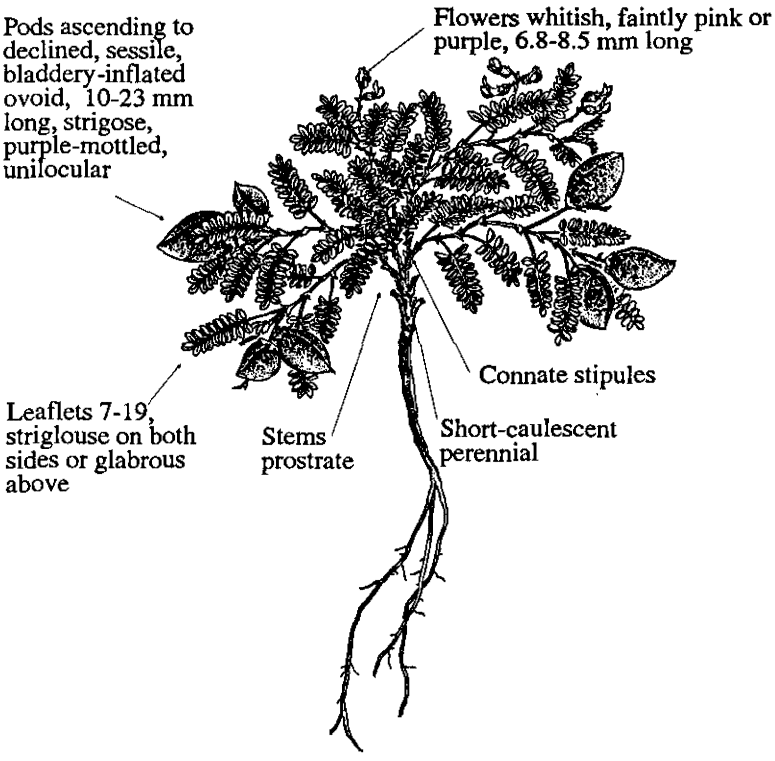
Look-alikes: The plants somewhat resemble *Astragalus beckwethii* var. *purpureus* M. E. Jones, but differ from that entity in the much longer calyx tube (7.5-9 mm versus 3.5-6.5) in flower, and in the bladdery inflated pod in fruit.

Closeup of Astragalus oophorus var. lonchocalyx by D. Atwood



Habitat of Astragalus oophorus var. lonchcalyx by D. Atwood

Species
Distribution


Pods ascending to declined, sessile, bladdery-inflated ovoid, 10-23 mm long, strigose, purple-mottled, unilocular
Flowers whitish, faintly pink or purple, 6.8-8.5 mm long
Connate stipules
Leaflets 7-19, striglouse on both sides or glabrous above
Stems prostrate
Short-caulescent perennial

ASTRAGALUS PERIANUS

Scientific Name: *Astragalus perianus* Barneby

Common Name: Rydberg milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Restricted to Utah in Iron, Garfield, Piute, Beaver, and Sevier counties

Management Responsibility: Dixie and Fishlake NF's, State Trust Lands, and private

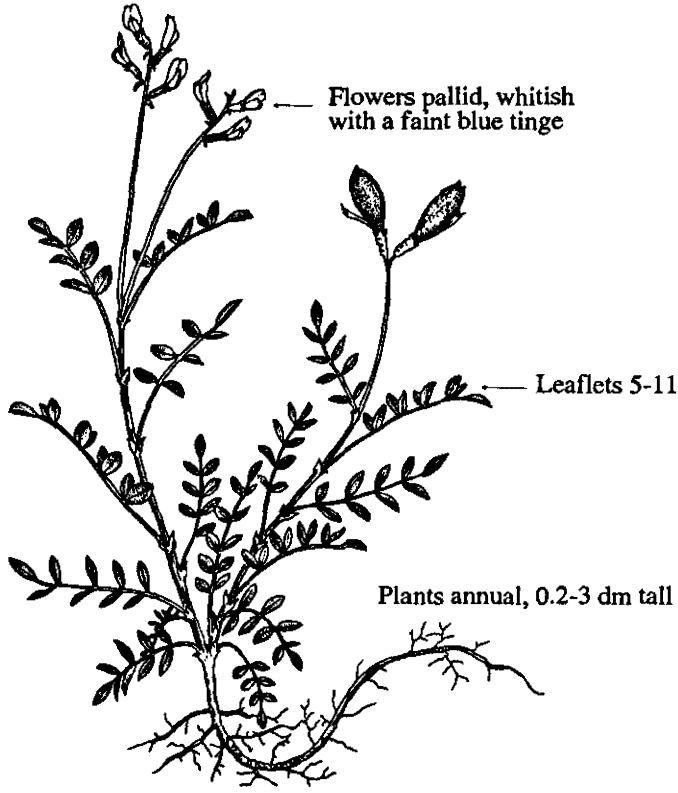
Habitat: Openings in spruce-fir forest, vasey sagebrush, black sagebrush, open aspen-fir-mahogany and alpine krummholz, on igneous intrusive gravels, volcanic gravel, or clay soil between 7,150 to 11,500 feet elevation, July-September.

Look-alikes: Similar to *A. serpens* and *A. limnocharis*, but distinguished by the fully amplexicaul confluent lower stipules, small blunt keel-petals, these ca 2/3 as long as the banner, and very short obscure gynophore ca equalling the hypanthium.

Closeup of Astragalus perianus by S. Welsh

Habitat of Astragalus perianus by S. Welsh

Species Distribution



ASTRAGALUS PREUSII VAR. *CUTLERI*

Scientific Name: *Astragalus preusii* Gray var. *cutleri* Barneby

Common Name: Copper Canyon milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

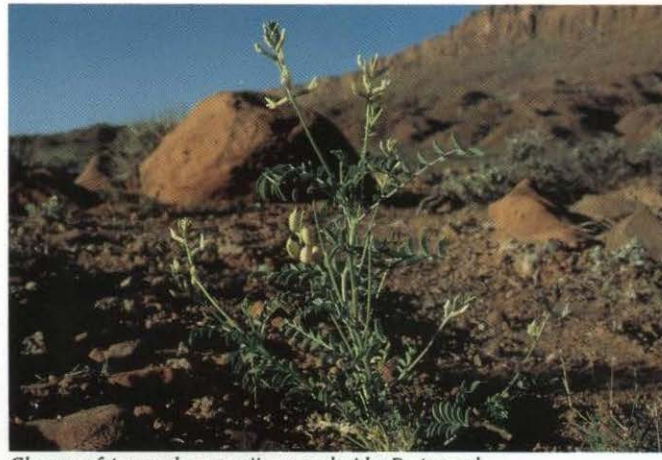
Synonyms: None

Global Distribution: Endemic to San Juan County, Utah

Management Responsibility: Navajo Nation TL-Oljeto Chapter, Glen Canyon NRA and BLM-Moab District?

Habitat: Warm desert shrub community at 3,800 feet elevation, April-early June.

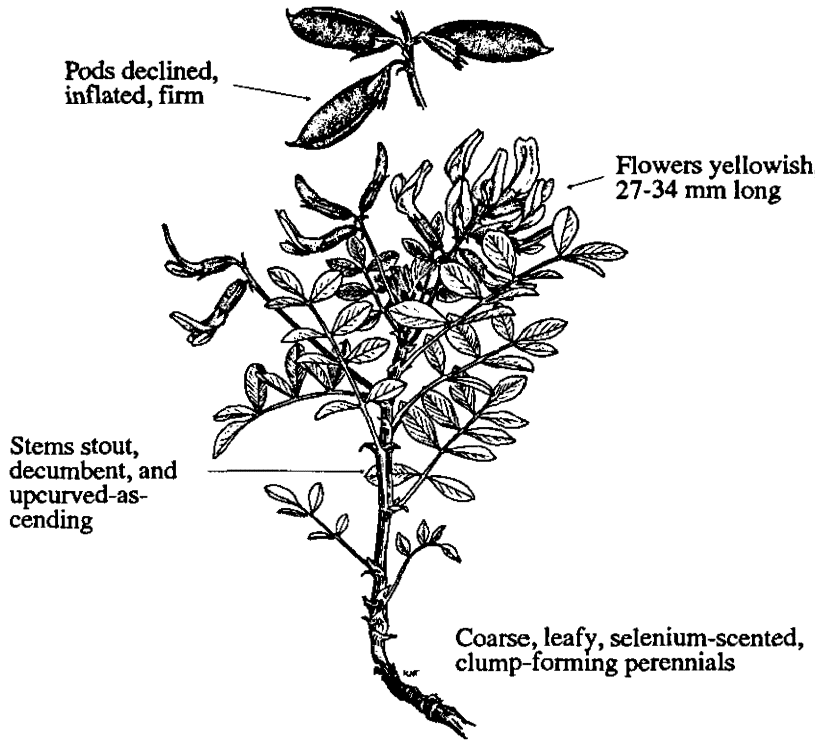
Look-alikes: Similar to the other varieties, but differing by the smaller stature, pallid, whitish flowers with a faint blue tinge, and fewer leaflets (5-11).



Closeup of Astragalus preusii var. cutleri by D. Atwood

Habitat of Astragalus preusii var. cutleri by D. Atwood

Species Distribution


Pods declined, inflated, firm
Flowers yellowish, 27-34 mm long
Stems stout, decumbent, and upcurved-ascending
Coarse, leafy, selenium-scented, clump-forming perennials

ASTRAGALUS SABULOSUS

Scientific Name: *Astragalus sabulosus* Jones

Common Name: Cisco milkvetch

Family (Common Name): Fabaceae or Leguminosae (Legume Family)

Synonyms: *Jonesiella sabulosa* (Jones) Rydb.

Global Distribution: Endemic to the Grand River Valley in Grand County, Utah

Management Responsibility: BLM-Moab District, Canyonlands NP?, Utah Division of Transportation, and State Trust Lands

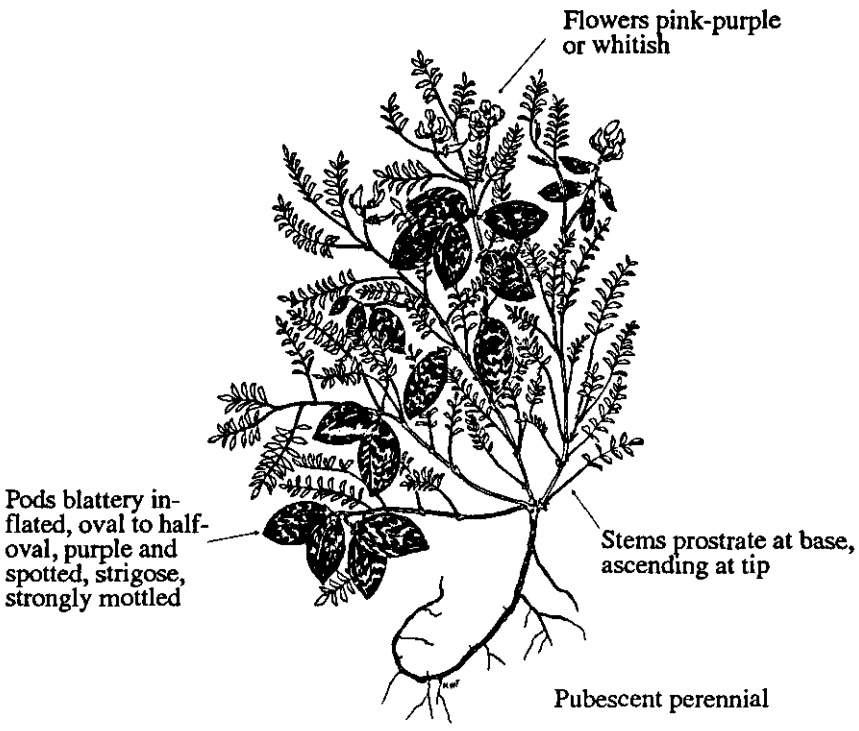
Habitat: Mancos Shales and Cedar Mountains in desert shrub communities at 4,260-5,250 feet elevation, mid April-May.

Look-alikes: Similar to *A. iselyi*, but different in the larger yellowish flowers (27-34 mm long vs 17-18 mm). Both species are related to *A. pattersonii* and *A. praelongus*, but differ from them in the low diffuse growth habit, deflexed pods, and the fewer, larger flowers.

Closeup of Astragalus sabulosus by S. Welsh

Habitat of Astragalus sabulosus by B. Franklin

Species
Distribution


Flowers pink-purple or whitish
Pods blattery inflated, oval to half-oval, purple and spotted, strigose, strongly mottled
Stems prostrate at base, ascending at tip
Pubescent perennial

ASTRAGALUS SERPENS

Scientific Name: *Astragalus serpens* Jones

Common Name: Plateau milkvetch

Family (Common Name): Fabaceae or Leguminosae (Legume Family)

Synonyms: *Phaca serpens* M.E. Jones

Global Distribution: Garfield, Sevier, Piute and Wayne counties, Utah

Management Responsibility: Fishlake NF, BLM-Richfield District, State Trust Land and private

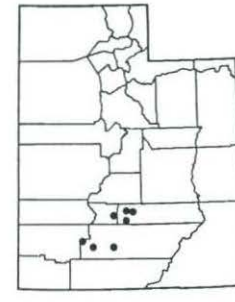
Habitat: Found on igneous gravel ridges between 6,800 to 10,500 feet elevation growing in sagebrush, pinyon-juniper and aspen-fir communities, May-September.

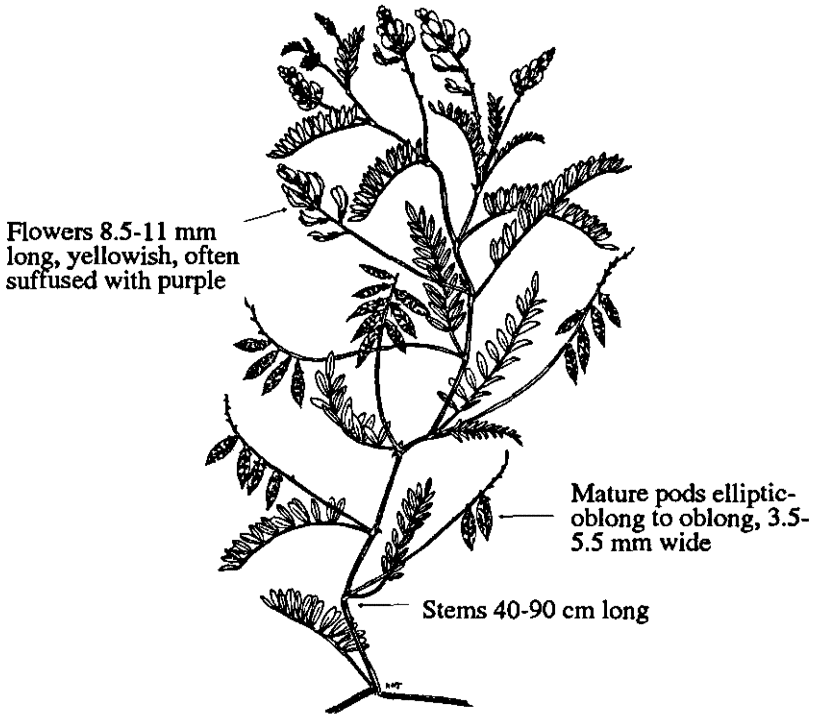
Look-alikes: *A. serpens* is closely related to *A. perianus*, but differs in its sessile pod, subterranean root crown and connate stipules.

Closeup of Astragalus serpens by S. Welsh

Habitat of Astragalus serpens by D. Atwood

Species Distribution




Flowers 8.5-11 mm long, yellowish, often suffused with purple
Mature pods elliptic-oblong to oblong, 3.5-5.5 mm wide
Stems 40-90 cm long

ASTRAGALUS SUBCINEREUS VAR. *BASALTICUS*

Scientific Name: *Astragalus subcinereus* Gray var. *basalticus* Welsh

Common Name: Basalt milkvetch or Silver milkvetch

Family (Common Name): Fabaceae or Leguminosae (Legume Family)

Synonyms: None

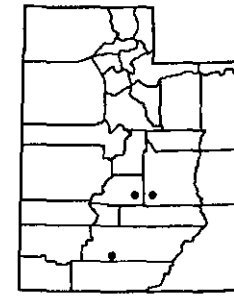
Global Distribution: Eastern Sevier, western Emery and Garfield counties, Utah

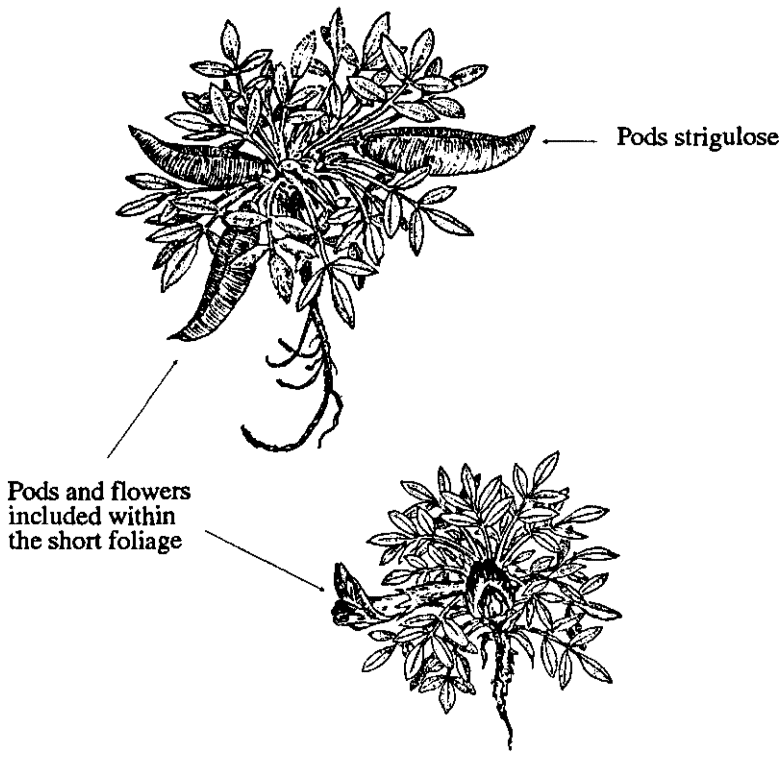
Management Responsibility: BLM-Moab and Richfield Districts and Bryce Canyon NP?

Habitat: Pinyon-juniper and ponderosa communities between 4,520 to 7,970 feet elevation, May-July.

Look-alikes: Similar to var. *subcinereus*, but having elliptic-oblong to oblong leaflets, 3.5-5.5 mm wide pods when mature, flowers 8.5-11 mm long, and stems 40-90 cm long.

Species
Distribution





ASTRAGALUS UNCIALIS

Scientific Name: *Astragalus uncialis* Barneby

Common Name: Current milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Millard County, Utah and Nye County, Nevada; a Great Basin endemic

Management Responsibility: BLM-Richfield District

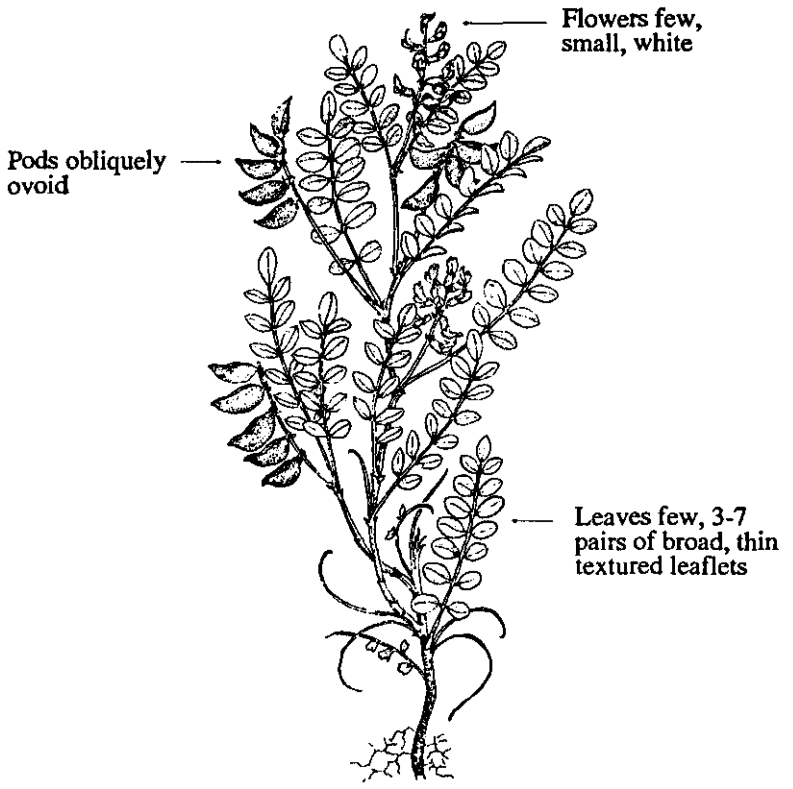
Habitat: Shadscale and budsage communities at 4,600 to 5,300 feet elevation, often associated with ancient terraces of Pleistocene lakes, April-early June.

Look-alikes: The species is closely allied to *A. newberryi* Gray, from which it differs in having merely strigulose pods, and with both pods and flowers included within the short foliage.

Closeup of Astragalus uncialis by M. Williams

Habitat of Astragalus uncialis by D. Atwood

Species
Distribution



ASTRAGALUS WETHERILLII

Scientific Name: *Astragalus wetherillii* Jones

Common Name: Wetherill milkvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Phaca wetherillii* (Jones) Rydb.

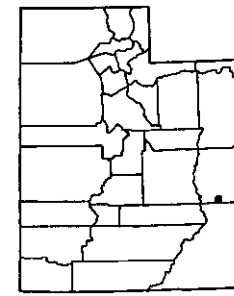
Global Distribution: Grand County (collected by Eastwood according to Jones 1923); central western Colorado

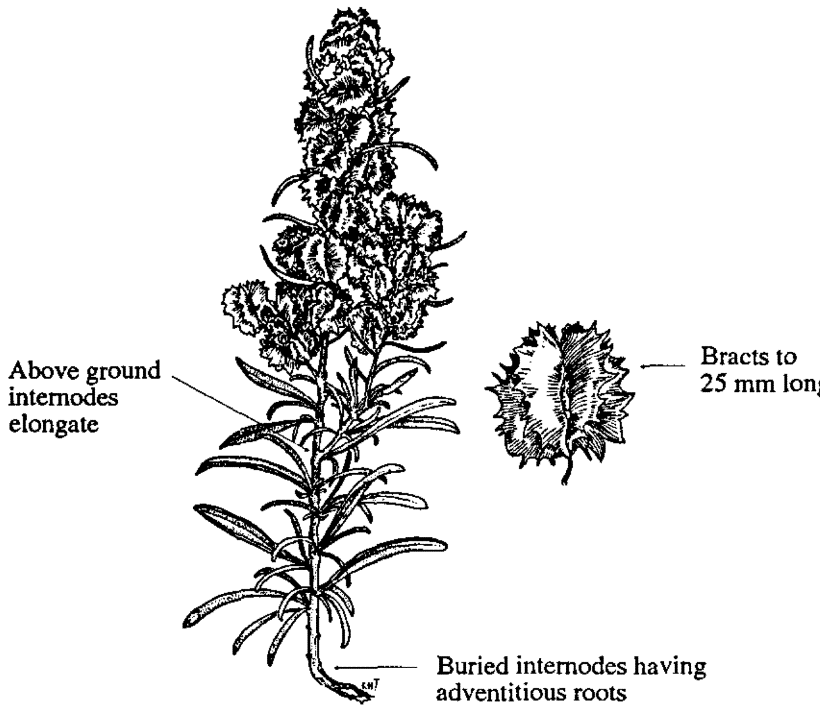
Management Responsibility: BLM-Moab District, private

Habitat: Mountain brush and pinyon-juniper communities at 4,700 to 5,800 feet in elevation.

Look-alikes: This is a distinctive species without clearly or closely allied species in the area in which it grows. It is characterized by continuing flowering long after fruit is set on the lower most racemes.

Species
Distribution





ATRIPLEX CANESCENS VAR. *GIGANTEA*

Scientific Name: *Atriplex canescens* (Pursh) Nutt. var. *gigantea* Welsh & Stutz

Common Name: Dunes four-wing saltbush

Family (Common Name): Chenopodiaceae (Goosefoot Family)

Synonyms: None

Global Distribution: Little Sahara Recreation Area, Juab County, Utah; a Great Basin endemic

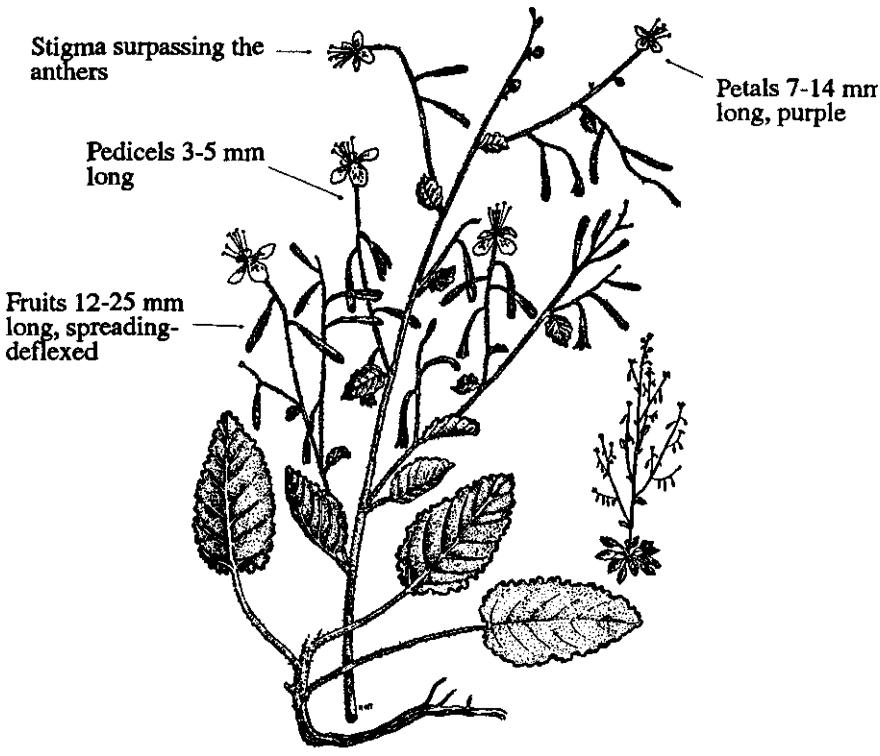
Management Responsibility: BLM-Richfield District

Habitat: Interdune valleys with scurfpea, anomalous sunflower, and other sand-loving plants, where they are encroached upon by the following dune, 4,760 to 5,250 feet elevation.

Look-alikes: The dunes four-wing saltbush is similar in most features with traditional *Atriplex canescens*, but differs in having bracts to 25 mm wide and greatly elongated stem internodes. To these features can be added the presence of adventitious roots at buried internodes and a diploid chromosome number of 2n = 18.

Closeup of Atriplex canescens var. gigantea by S. Welsh

Species Distribution



CAMISSONIA ATWOODII

Scientific Name: *Camissonia atwoodii* Cronq.

Common Name: Atwood's camissonia or Smoky Mountain evening primrose

Family (Common Name): Onagraceae (Evening Primrose Family)

Synonyms: None

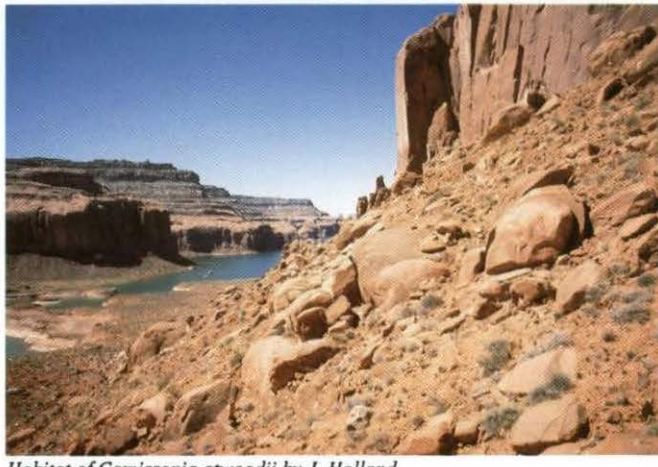
Global Distribution: Endemic to Last Chance drainage of Kane County, Utah

Management Responsibility: BLM-Cedar City District and Glen Canyon NRA

Habitat: Clay soils of the Tropic Shale and Carmel Formations, salt desert shrub community, 4,060 to 5,000 feet elevation, late September-November.

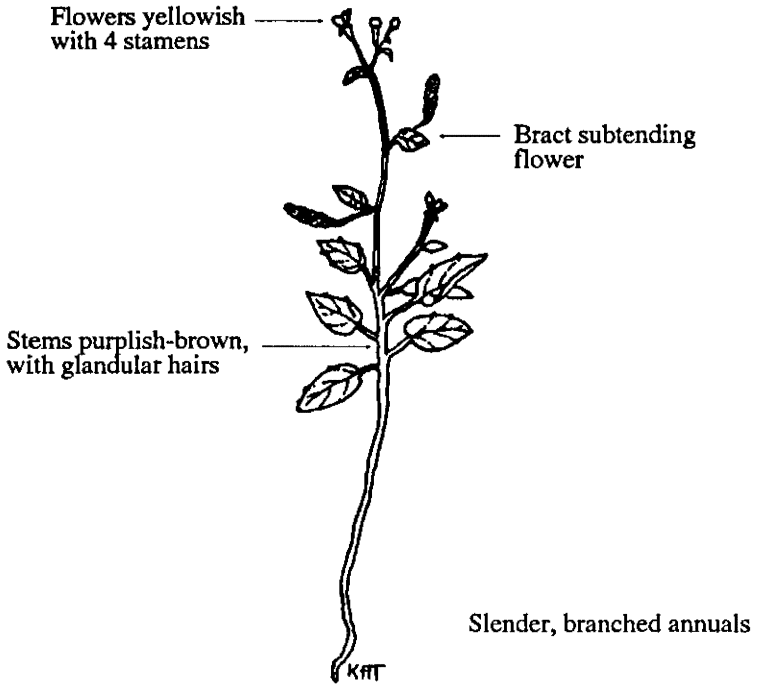
Look-alikes: *C. megalantha* is very similar, but geographically isolated.

Closeup of Camissonia atwoodii by J. Holland



Habitat of Camissonia atwoodii by J. Holland

Species Distribution



CAMISSONIA EXILIS

Scientific Name: *Camissonia exilis* (Raven) Raven

Common Name: Slender camissonia

Family (Common Name): Onagraceae (Evening-primrose Family)

Synonyms: *Oenothera exilis* Raven

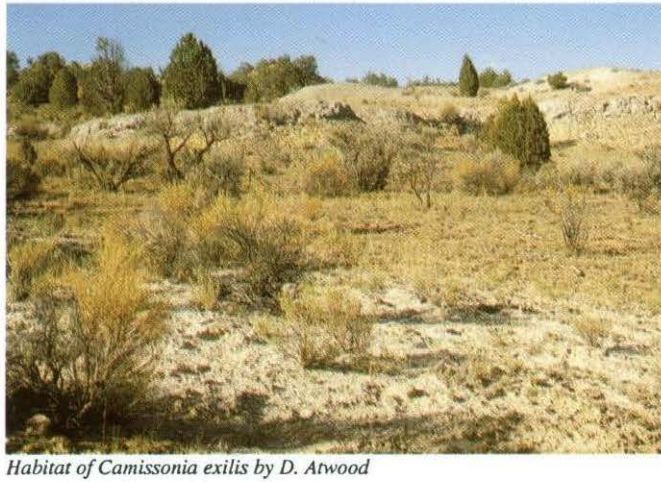
Global Distribution: Coconino and Mohave counties, Arizona and Kane County, Utah; a Colorado Plateau endemic

Management Responsibility: BLM-Cedar City and Arizona Strip Districts

Habitat: Fine textured substrates on gypsum and travertine in warm desert shrub communities, with plants such as *Acacia greggii, Stanleya pinnata, Eriogonum* spp., *Yucca baccata, Chrysothamnus* spp., and *Ephedra* spp. at 5,600 feet elevation, May-mid-June.

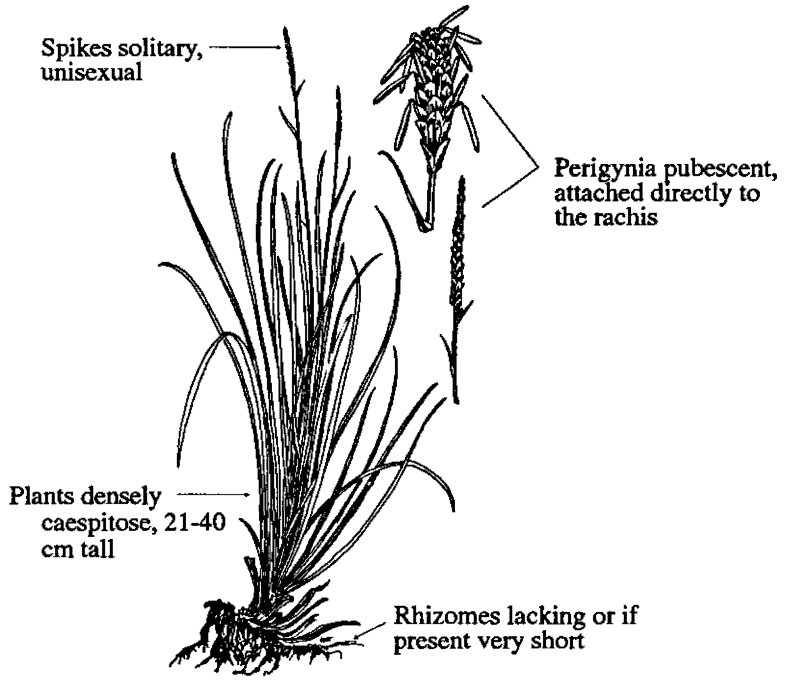
Look-alikes: The presence of four stamens mark this species as distinctive from all other species of *Camissonia.* Its nearest relatives appear to be *Camissonia walkeri* and *Camissonia scapoidea*, however, in its branching pattern and aspect the species simulates *C. parryi.*

Closeup of Camissonia exilis by B. Phillips



Habitat of Camissonia exilis by D. Atwood

Species Distribution


Spikes solitary, unisexual
Perigynia pubescent, attached directly to the rachis
Plants densely caespitose, 21-40 cm tall
Rhizomes lacking or if present very short

CAREX CURATORUM

Scientific Name: *Carex curatorum* Stacey

Common Name: Canyonlands sedge

Family (Common Name): Cyperaceae (Sedge Family)

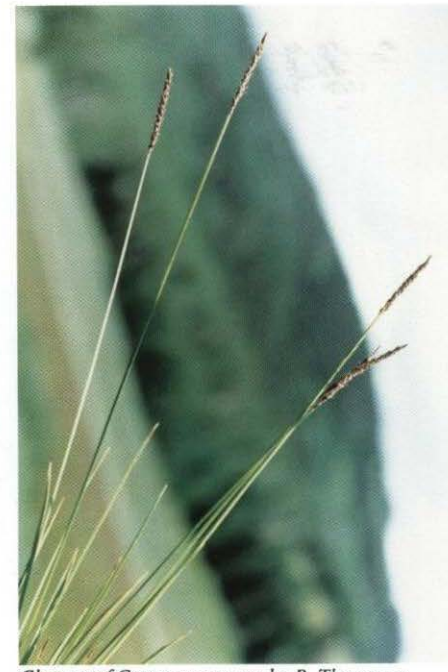
Synonyms: *Carex scirpoidea* Michx. var. *curatorum* (Stacey) Cronq.

Global Distribution: Southern Utah in Kane and San Juan counties and northern Arizona

Management Responsibility: Manti-LaSal NF, Glen Canyon NRA, Navajo Nation?-Navajo Mountain?, Oljato?, and Shonto?, and BLM-Moab and Cedar City Districts

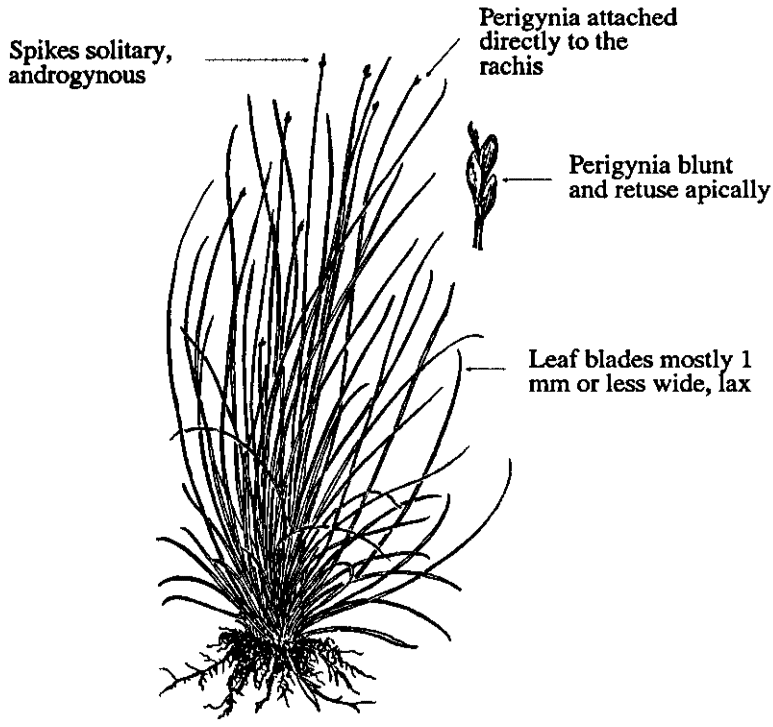
Habitat: Hanging gardens and canyons along the Colorado and San Juan rivers between 3,770 to 4,395 feet elevation, May-August.

Look-alikes: Related to, but distinct from var. *pseudoscirpoidea* in having pistillate scales shorter and narrower than the perigynia, plants are larger (2.5-8 cm high), and spikes mostly 2.5-5 cm long.



Closeup of Carex curatorum by B. Thompson

Species
Distribution


Spikes solitary, androgynous
Perigynia attached directly to the rachis
Perigynia blunt and retuse apically
Leaf blades mostly 1 mm or less wide, lax

CAREX LEPTALEA

Scientific Name *Carex leptalea* Wahl.

Common Name: Bristle-stalk sedge

Family: Cyperaceae (Sedge Family)

Synonyms: None

Global Distribution: Alaska to Labrador, south to northern California, Idaho, northeastern Utah (Duchesne and Uintah counties), Colorado, Texas, and Florida

Management Responsibility: Ashley NF

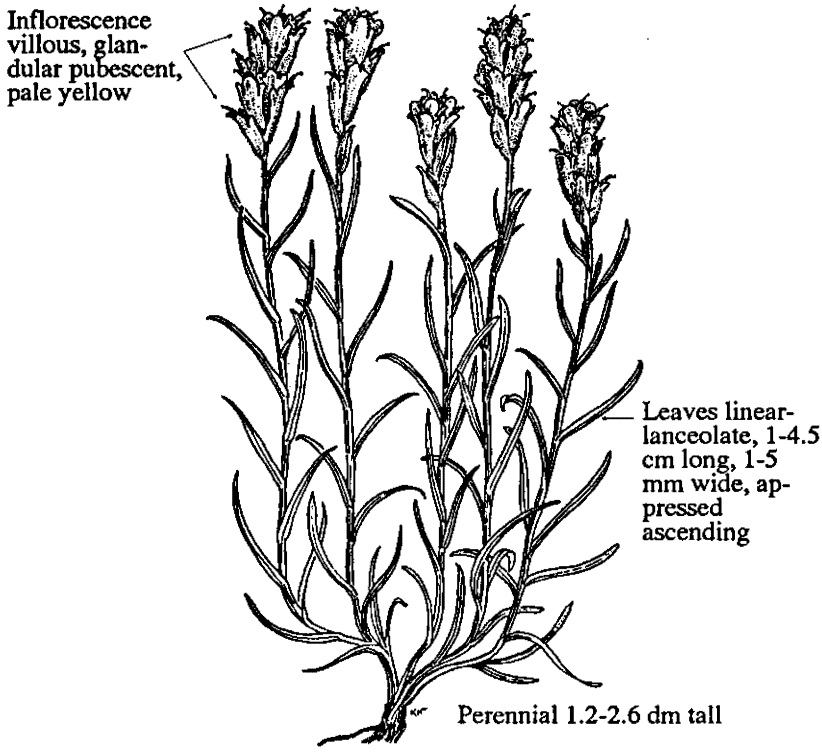
Habitat: Shady seep, and bogs between 7,200 to 7,315 feet elevation, July-August.

Look-alikes: Similar to *C. nigricans,* but different in the persistent pistillate scales and widely spreading or more appressed perigynia, and from *C. diocia* in the rounded or emarginate tipped perigynia vs beaked in *C. dioica.*

Habitat of Carex leptalea by S. Goodrich

Closeup of Carex leptalea by S. Goodrich

Species
Distribution


Inflorescence villous, glandular pubescent, pale yellow
Leaves linear-lanceolate, 1-4.5 cm long, 1-5 mm wide, appressed ascending
Perennial 1.2-2.6 dm tall

CASTILLEJA AQUARIENSIS

Scientific Name: *Castilleja aquariensis* N. Holmgren

Common Name: Aquarius paintbrush

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Endemic to the Aquarius Plateau, Garfield and Wayne counties, in South-central Utah

Management Responsibility: Dixie NF

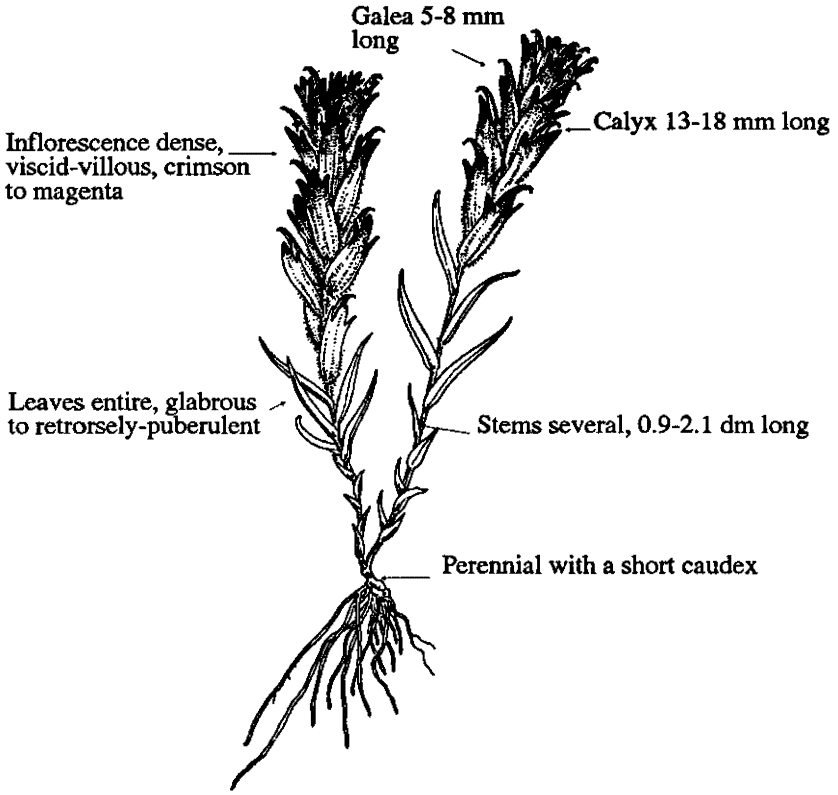
Habitat: Sagebrush and grass meadow communities adjacent to aspen-subalpine fir on clay-loam soils at about 9,800-11,000 feet elevation, July-August.

Look-alikes: Closely resembling taxa in *C. rhexifolia,* but recognized by the linear, appressed-ascending leaves and smaller (1.5-3 dm tall), fewer stemmed (1-few) plants. Similar to *C. occidentalis* which is smaller (0.8-2 dm tall) and has decumbent stems.

Closeup of Castilleja aquariensis by D. Atwood

Habitat of Castilleja aquariensis by D. Atwood

Species
Distribution


Galea 5-8 mm long
Calyx 13-18 mm long
Inflorescence dense, viscid-villous, crimson to magenta
Leaves entire, glabrous to retrorsely-puberulent
Stems several, 0.9-2.1 dm long
Perennial with a short caudex

CASTILLEJA PARVULA VAR. *PARVULA*

Scientific Name: *Castilleja parvula* Rydb. var *parvula*

Common Name: Tushar paintbrush

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Endemic to South-central and west-central Utah in Beaver, Piute, and Garfield counties.

Management Responsibility: Fishlake and Dixie NF's and private

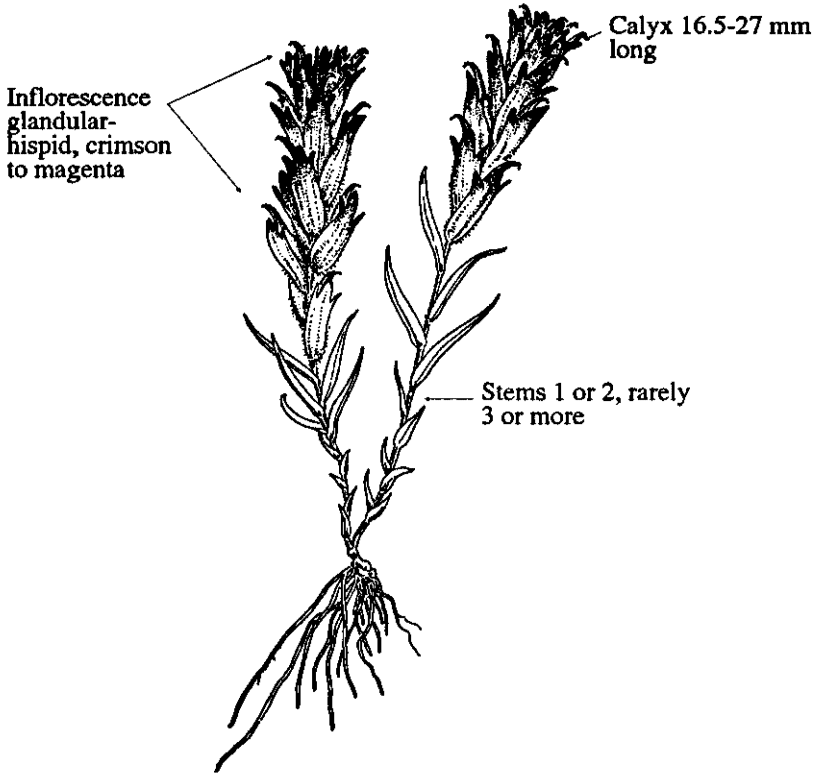
Habitat: Alpine areas on igneous gravels and outcrops between 10,000 to 12,100 feet elevation, July.

Look-alikes: Similar to var. *revealii,* but distinct in the mostly several persistent stems which usually lack the purplish color and in habitat (igneous gravels vs Wasatch Limestone habitats).

Closeup of Castilleja parvula var. parvula by D. Atwood

Habitat of Castilleja parvula var. parvula by D. Atwood

Species Distribution



CASTILLEJA PARVULA VAR. *REVEALII*

Scientific Name: *Castilleja parvula* Rydb. var. *revealii* (N. Holmgren) Atwood

Common Name: Reveal paintbrush

Family (Common Name): Scrophulariaceae (Figwort Family)

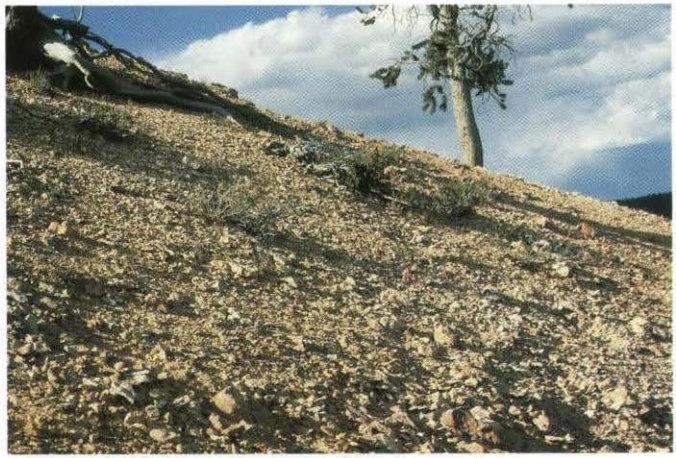
Synonyms: *Castilleja revealii* N. Holmgren

Global Distribution: Endemic to Southwestern and southern Utah in Garfield, Iron, and Kane counties

Management Responsibility: Dixie NF, Bryce Canyon NP and Cedar Breaks NM?

Habitat: Ponderosa pine/bristlecone pine community on gravelly soils of the Wasatch Limestone Formation between 7,500-8,300 feet elevation, late June-August.

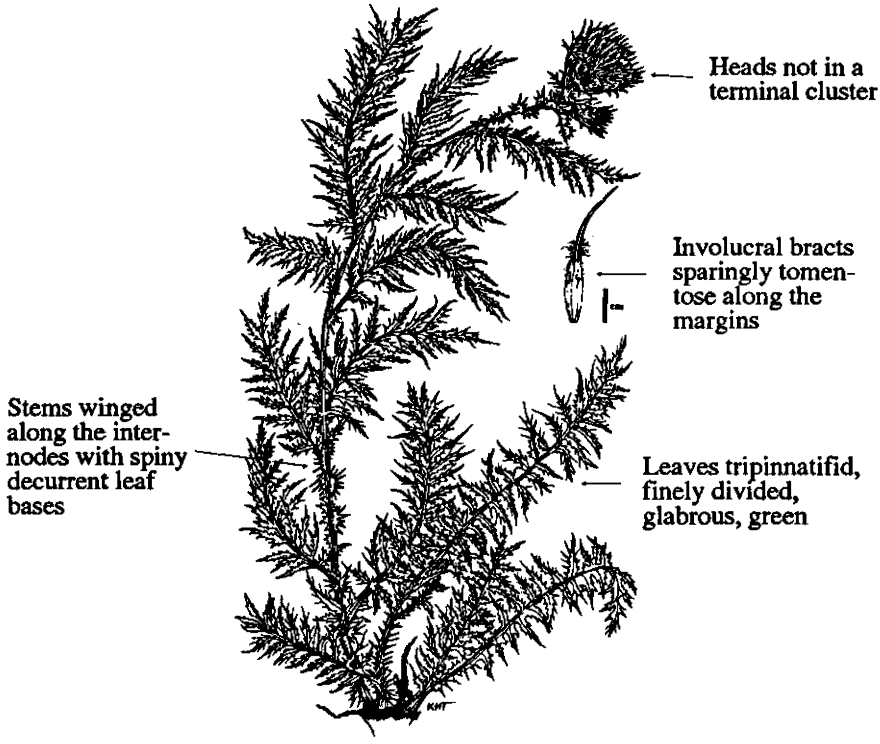
Look-alikes: Similar to var. *parvula,* but different in the usually solitary, (sometimes 2-3) purplish stems and habitat (Wasatch Limestone vs igneous gravels).



Habitat of Castilleja parvula var. revealii by D. Atwood

Closeup of Castilleja parvula var. revealii by D. Atwood

Species Distribution


Heads not in a terminal cluster
Involucral bracts sparingly tomentose along the margins
Stems winged along the internodes with spiny decurrent leaf bases
Leaves tripinnatifid, finely divided, glabrous, green

CIRSIUM OWNBEYI

Scientific Name: *Cirsium ownbeyi* Welsh

Common Name: Ownbey thistle

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to the east flank of the Uinta Mountains in Daggett and northern Uintah counties, Utah; Moffat County, Colorado

Management Responsibility: BLM-Vernal District and Dinosaur NM

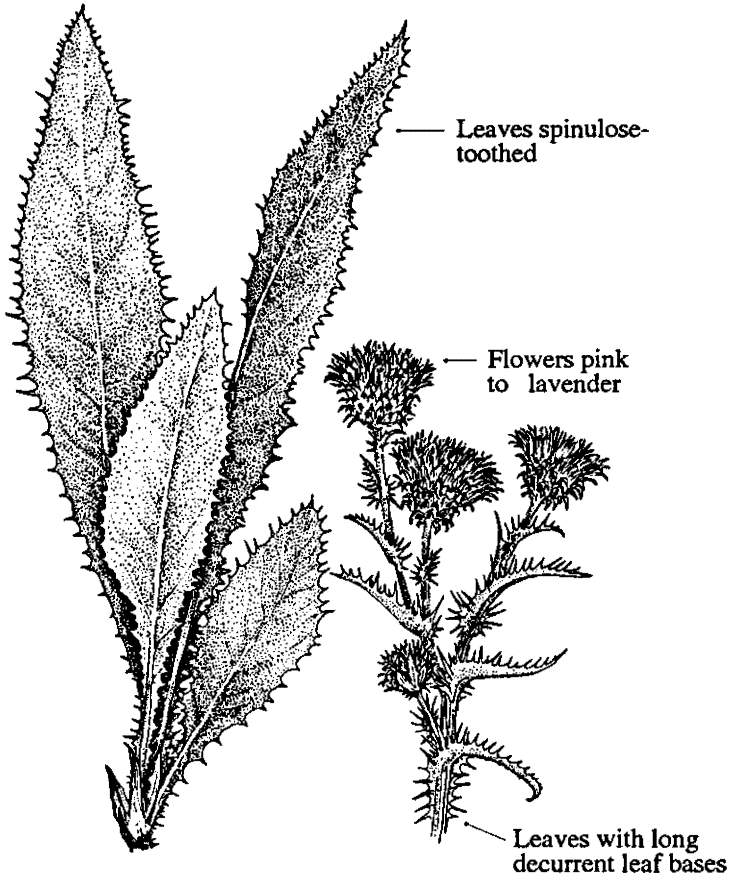
Habitat: Sagebrush, juniper, and riparian communities between 5,500 to 6,200 feet elevation, late May-August.

Look-alikes: Recognized by the finely divided, tripinnatifid, glabrous, green leaves, stems winged along the internodes with spiny decurrent leaf bases, heads not in a terminal cluster, and the involucral bracts sparingly tomentose along the margins.

Habitat of Cirsium ownbeyi by D. Atwood

Closeup of Cirsium ownbeyi by W. Jennings

Species
Distribution



CIRSIUM VIRGINENSIS

Scientific Name: *Cirsium virginensis* Welsh

Common Name: Virgin thistle

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

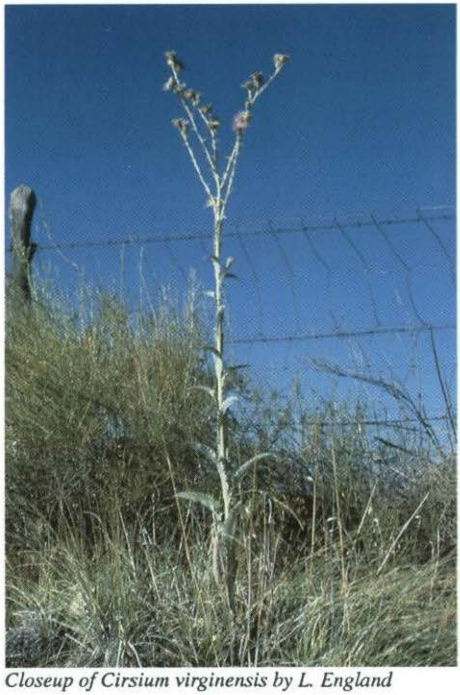
Global Distribution: Washington County, Utah, Clark County, Nevada, and Mohave County, Arizona; a Mohave endemic

Management Responsibility: BLM-Cedar City District, private

Habitat: Saline seeps and stream terraces at 2,788 - 3,116 feet elevation, May-September.

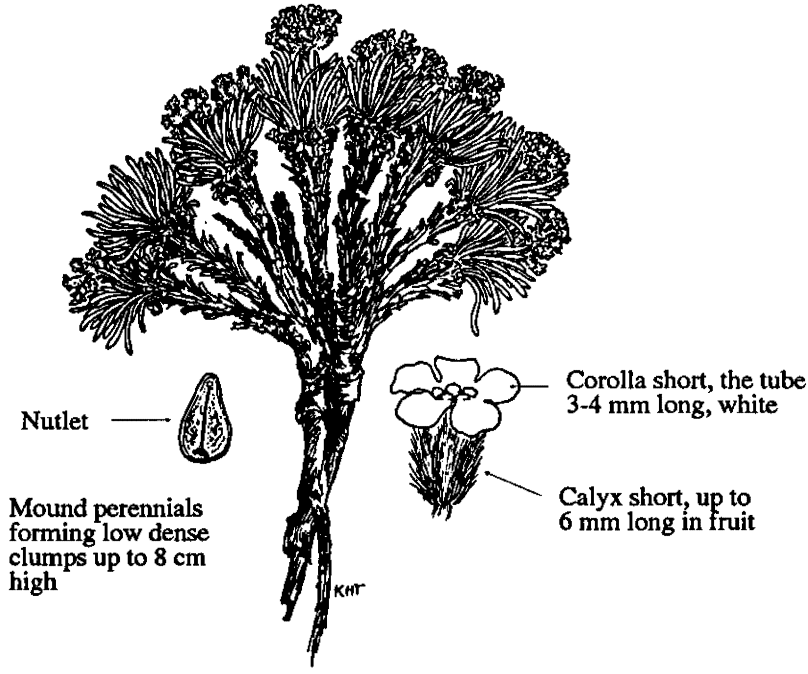
Look-alikes: The small heads, long decurrent leaf bases, and merely spinose-toothed leaves easily distinquish this species. The relationships of the Virgin thistle apparently lie with *C. mohavensis* Greene.

Habitat of Cirsium virginensis by L. England



Closeup of Cirsium virginensis by L. England

Species
Distribution


Nutlet
Mound perennials forming low dense clumps up to 8 cm high
Corolla short, the tube 3-4 mm long, white
Calyx short, up to 6 mm long in fruit
KHT

CRYPTANTHA CAESPITOSA

Scientific Name: *Cryptantha caespitosa* (A. Nels.) Payson

Common Name: Tufted cryptanth or caespitose catseye

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: *Oreocarya caespitosa* A. Nels.

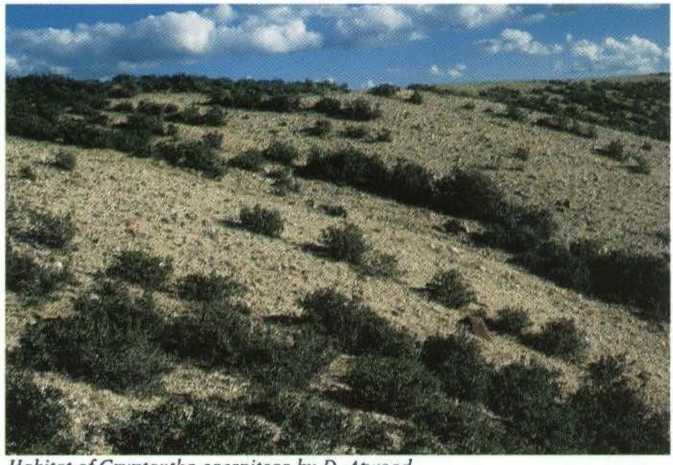
Global Distribution: Northeastern and east-central Utah, Duchesne, Uintah, Daggett, and Carbon counties; southwestern Wyoming, and southeastern Idaho

Management Responsibility: Ashley NF, BLM-Salt Lake and Vernal Districts

Habitat: Forb-grass, pinyon-juniper, mountain brush, limber pine, and spruce-fir communities on clay soils between 4,950 to 10,235 feet elevation, May-June.

Look-alikes: A distinct species in its area based on its small, low perennial habit, and small flowers (3-4 mm long).

Closeup of Cryptantha caespitosa by D. Atwood



Habitat of Cryptantha caespitosa by D. Atwood

Species Distribution

CRYPTANTHA CINEREA VAR. *ARENICOLA*

Scientific Name: *Cryptantha cinerea* (Torr.) Cronq. var. *arenicola* Higgins & Welsh

Common Name: Sand-dwelling cryptanth

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: None

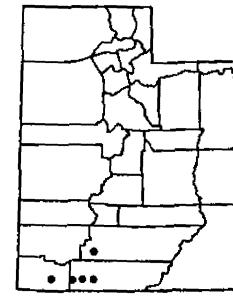
Global Distribution: Garfield, Kane, and Washington Counties, Utah

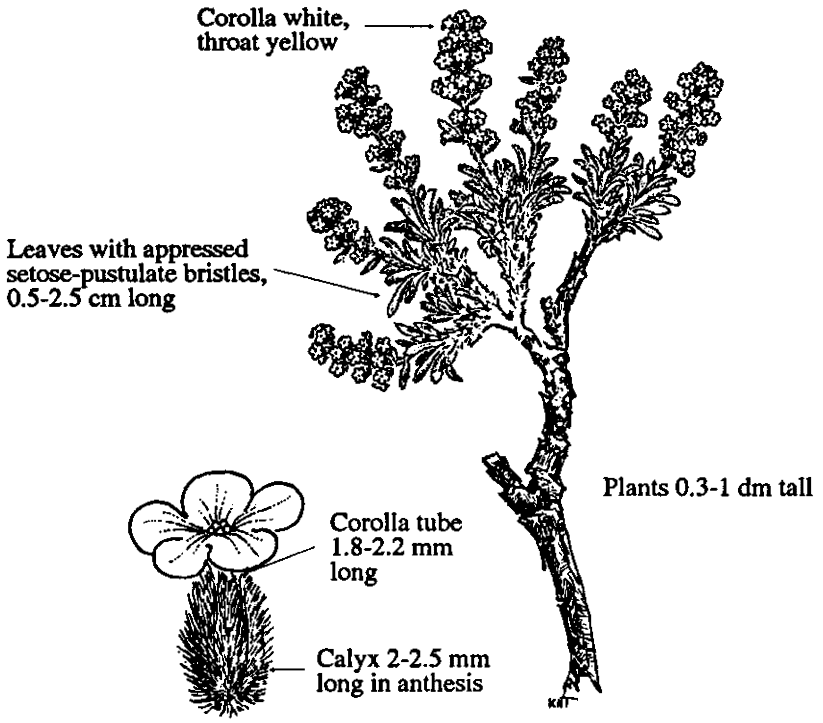
Management Responsibility: BLM-Cedar City District

Habitat: Navajo blow-sand, with *Wyethia scabra, Psoralidium lanceolatum*, and other sand-loving plants, June.

Look-alikes: Distinct from other varities by the simple stems, nearly capitate inflorescence, and habitat.

Species
Distribution




Corolla white, throat yellow
Leaves with appressed setose-pustulate bristles, 0.5-2.5 cm long
Plants 0.3-1 dm tall
Corolla tube 1.8-2.2 mm long
Calyx 2-2.5 mm long in anthesis

CRYPTANTHA COMPACTA

Scientific Name: *Cryptantha compacta* Higgins

Common Name: Mound cryptanth

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: None

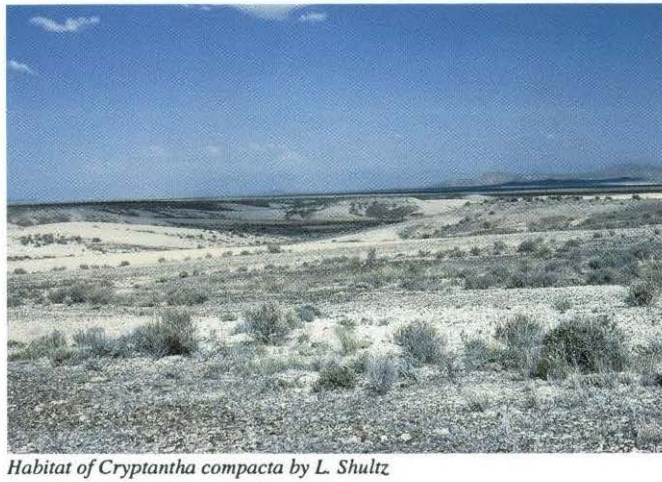
Global Distribution: Central, west-central, south-central, and southwestern Utah in Juab, Millard, Beaver, Sanpete, Sevier, and Tooele counties

Management Responsibility: Fishlake and Wasatch-Cache NF's, BLM-Salt Lake, Cedar City and Richfield Districts, Bryce Canyon NP, Desert Range Experiment Station and State

Habitat: Salt desert shrub and mixed desert shrub communities between 4,950 to 9,250 feet elevation, May-June.

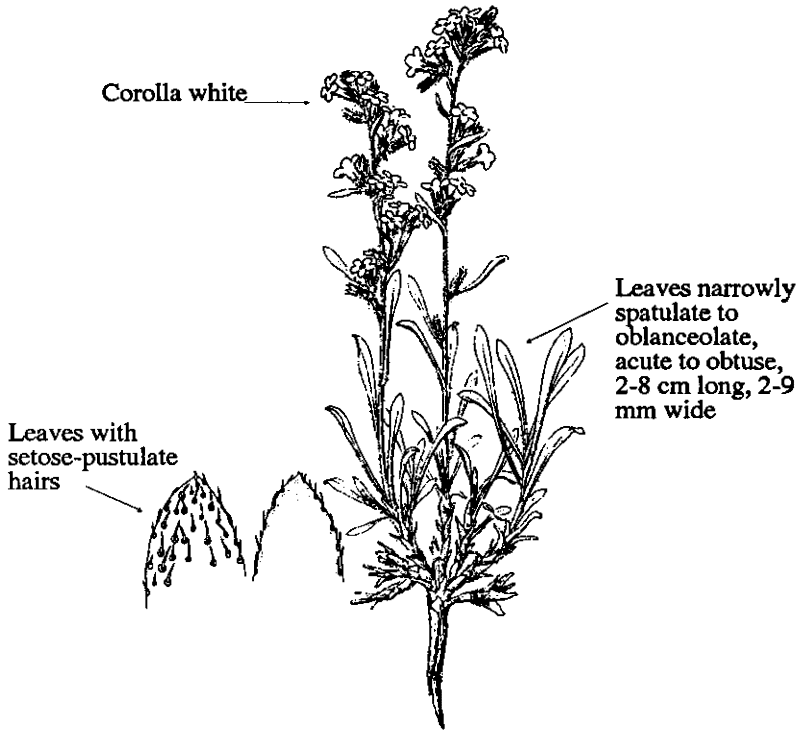
Look-alikes: Close to *C. humilis,* but the pubescence less spreading and less bristly and somewhat paler in aspect, plants smaller (0.3-1 dm high), leaves 0.5-2.5 cm long vs longer, calyx 2-2.5 mm long vs 3-5 mm, and the corolla tube 1.8-2.2 mm long vs 3-5 mm long in *C. humilis.*

Closeup of Cryptantha compacta by L. Shultz



Habitat of Cryptantha compacta by L. Shultz

Species
Distribution


Corolla white
Leaves narrowly spatulate to oblanceolate, acute to obtuse, 2-8 cm long, 2-9 mm wide
Leaves with setose-pustulate hairs

CRYPTANTHA CREUTZFELDTII

Scientific Name: *Cryptantha creutzfeldtii* Welsh

Common Name: Creutzfeldt-flower

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: None

Global Distribution: Endemic to Central Utah in Carbon and Emery counties

Management Responsibility: Manti-LaSal NF, BLM-Moab District and private

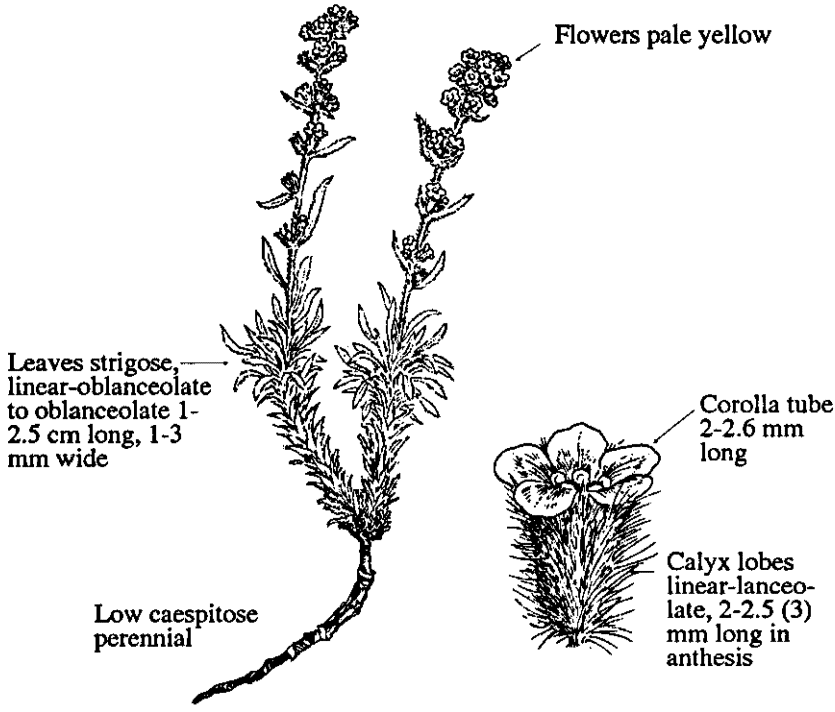
Habitat: Shadescale and mat atriplex communities on the Mancos Shale Formation between 5,250 to 6,495 feet elevation, late April-June.

Look-alikes: Close to *C. jonesii*, but with glabrous leaves above and the lower surface having mostly appressed, pustulate-based bristles, with few or no finer non-pustulate hairs, and the basal leaves obtuse to acutish and more pointed, calyx 9-13 mm long in fruit and nutlets smaller (4-5 mm long).

Closeup of Cryptantha creutzfeldii by B. Thompson

Habitat of Cryptantha creutzfeldii by B. Thompson

Species
Distribution


Flowers pale yellow
Leaves strigose, linear-oblanceolate to oblanceolate 1-2.5 cm long, 1-3 mm wide
Corolla tube 2-2.6 mm long
Calyx lobes linear-lanceolate, 2-2.5 (3) mm long in anthesis
Low caespitose perennial

CRYPTANTHA OCHROLEUCA

Scientific Name: *Cryptantha ochroleuca* Higgins

Common Name: Yellow-white cryptanth

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: None

Global Distribution: Endemic to Garfield County in south-central Utah

Management Responsibility: Dixie NF, Bryce Canyon NP, BLM Cedar City District, private and State Trust Lands

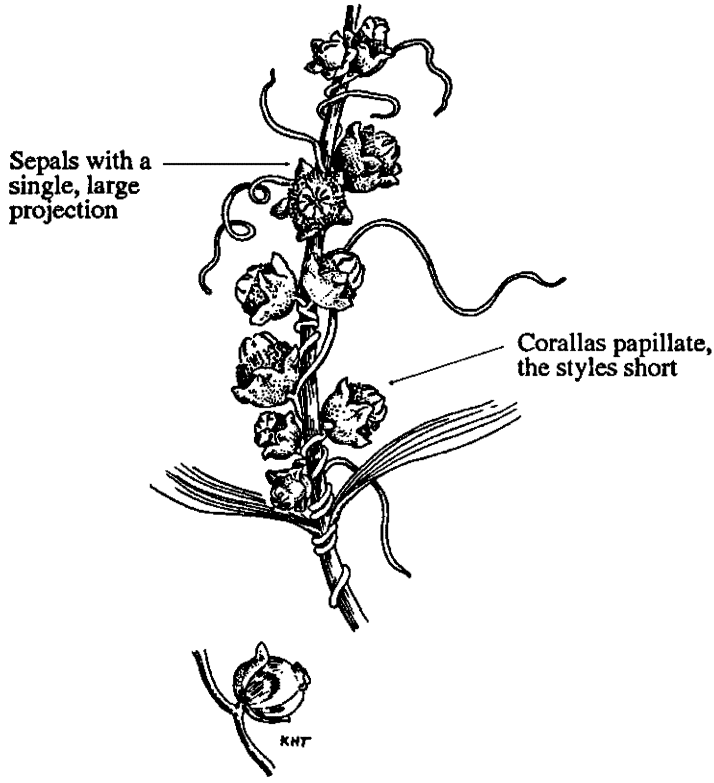
Habitat: Pinyon-juniper, ponderosa pine, and bristlecone pine communities on the Pink Limestone member of the Wasatch Formation between 7,500 to 9,350 feet elevation, May to June.

Look-alikes: Related to *C. compacta* which has white flowers vs pale yellow flowers, nutlets conspicuously muricate vs muricate and rugose or tuberulate and the style equalling or shorter than the fruit vs longer in *ochroleuca.*

Closeup of Cryptantha ochroleuca by D. Atwood

Habitat of Cryptantha ochroleuca by J. Tuhy

Species
Distribution



CUSCUTA WARNERI

Scientific Name: *Cuscuta warneri* Yuncker

Common Name: Warner dodder

Family (Common Name): Cuscutaceae (Dodder Family)

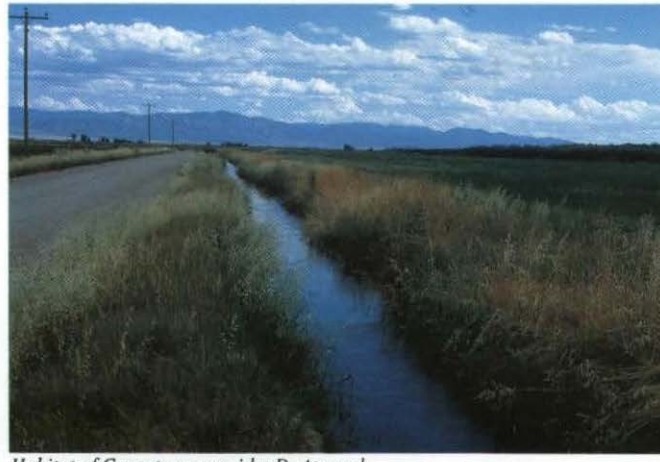
Synonyms: None

Global Distribution: Millard County, Utah; a Great Basin endemic

Management Responsibility: BLM-Richfield District, private

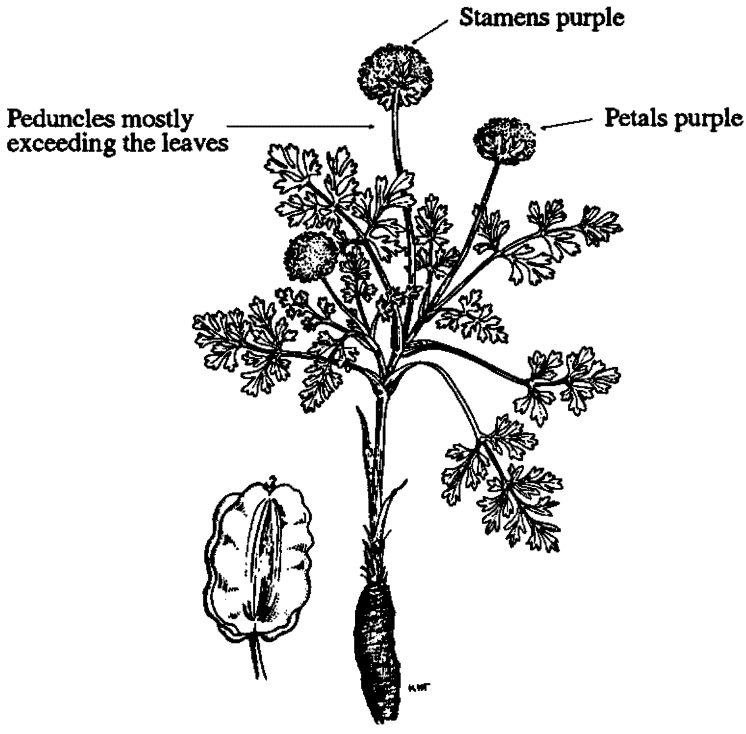
Habitat: The Warner dodder was growing historically in a weedy area between a road and an alfalfa on the host plant, *Phyla cuneifolia,* September.

Look-alikes: This dodder is similar to other species of *Cuscuta.* It belongs to the large group of species with capitate stigmas and infrastaminal scales, but is distinguished from them by the sepals having a single, large projection and very papillate corollas, globose capsules and short styles that barely exceed the collar.



Habitat of Cuscuta warneri by D. Atwood

Species
Distribution



CYMOPTERUS ACAULIS VAR. *HIGGINSII*

Scientific Name: *Cymopterus acaulis* (Pursh) Raf. var. *higginsii* (Welsh) Goodrich

Common Name: Higgins biscuitroot

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: *Cymopterus higginsii* Welsh

Global Distribution: Endemic to Kane County, Utah.

Management Responsibility: BLM-Cedar City District and Glen Canyon NRA

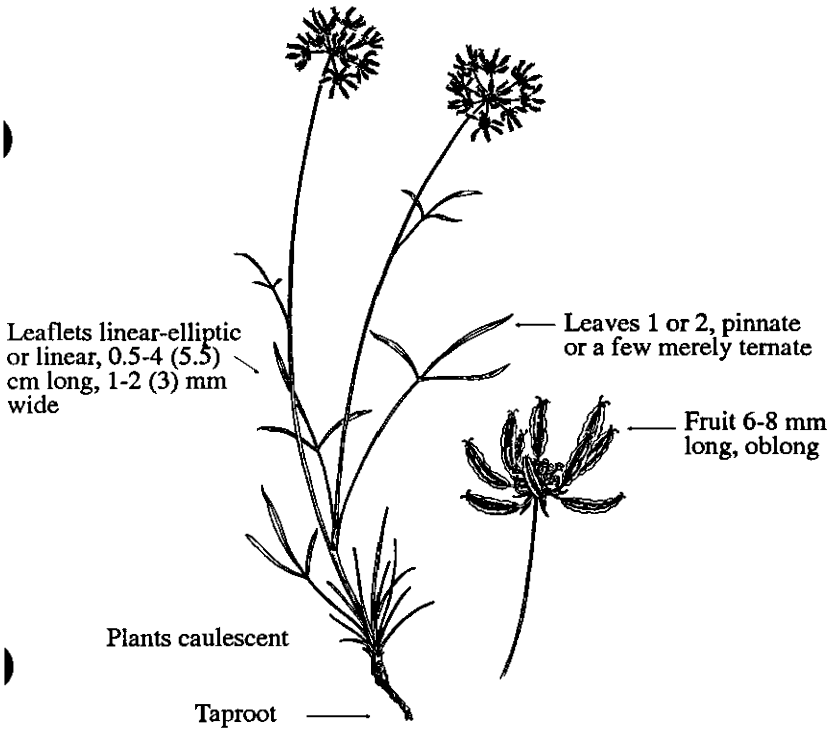
Habitat: Sandy-gravelly alluvium of the Tropic Shale Formation in desert shrub communities at 5,000 feet elevation, late March-May.

Look-alikes: Distinct from other varieties by the purple stamens and petals and peduncles which mostly exceed the leaves.

Habitat of Cymopterus acaulis var. higginsii by J. Holland

Closeup of Cymopterus acaulis var. higginsii by J. Holland

Species
Distribution


Leaflets linear-elliptic or linear, 0.5-4 (5.5) cm long, 1-2 (3) mm wide
Leaves 1 or 2, pinnate or a few merely ternate
Fruit 6-8 mm long, oblong
Plants caulescent
Taproot

CYMOPTERUS BECKII

Scientific Name: *Cymopterus beckii* Welsh & Goodrich

Common Name: Pinnate spring parsley or Beck biscuitroot

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: None

Global Distribution: Endemic to San Juan and Wayne counties in southeastern and south-central Utah

Management Responsibility: Manti-LaSal NF, BLM-Moab and Richfield? Districts, Capitol Reef NP and Canyonlands NM

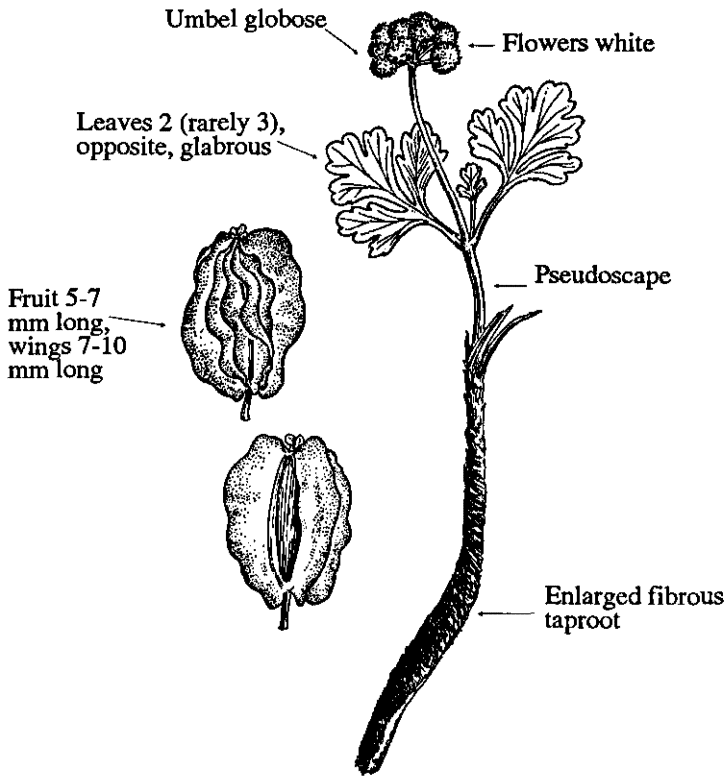
Habitat: Pinyon-juniper, mountain brush, and ponderosa pine communities, sandy or stoney places between 5,575 to 7,050 feet elevation, April-June.

Look-alikes: Closely allied to *C. lemmonii*, but distinct in having entire leaflets, glabrous peduncles and rays, and longer fruit (6-8 mm long).

Closeup of Cymopterus beckii by D. Atwood

Habitat of Cymopterus beckii by B. Franklin

Species
Distribution



CYMOPTERUS COULTERI

Scientific Name: *Cymopterus coulteri* (Jones) Mathias

Common Name: Coulter biscuitroot

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: *Cymopterus corrugatus* Jones var. *coulteri* (Jones) Mathias, *C. corrugatus* Jones var. *scopulicola* Jones, *Rhysopterus jonesii*

Global Distribution: Endemic to central and west-central Utah in Juab, Sanpete, Sevier, and Tooele counties

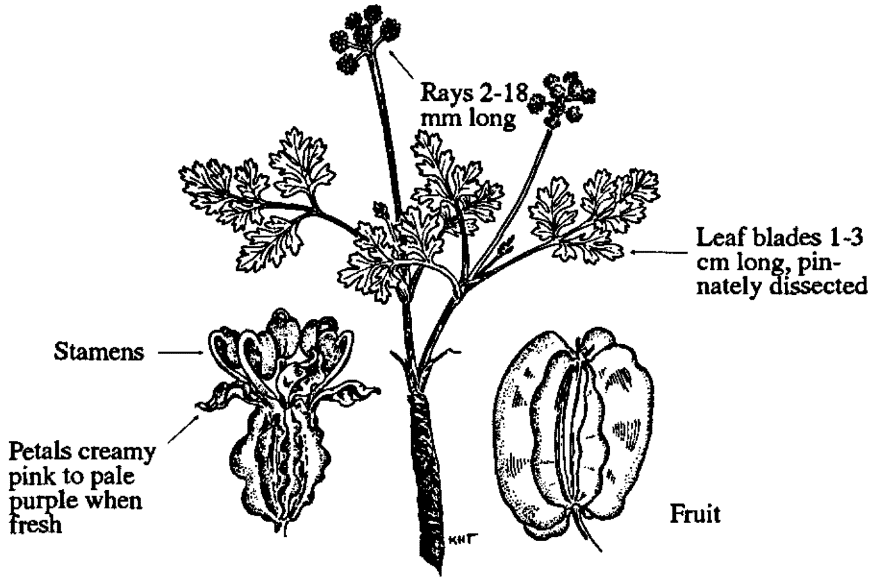
Management Responsibility: BLM-Richfield and Salt Lake Districts, Fishlake and Dixie NF's, State, and private

Habitat: Black sagebrush, shadscale, desert shrub, and juniper communities, gravelly to clayey soil between 4,955 to 6,000 feet elevation, April-June.

Look-alikes: Related to *C. globosus*, but having ternate leaves with the blades reniform, orbicular to ovate in outline, the wings of the fruit papery, and yellowish or purplish anthers vs white in *C. globosus*.

Closeup of Cymopterus coulteri by S. Welsh

Species
Distribution


Rays 2-18 mm long
Leaf blades 1-3 cm long, pinnately dissected
Stamens
Petals creamy pink to pale purple when fresh
Fruit
Acaulescent, scabrous, perennial, taproot enlarged, deep-seated

CYMOPTERUS MINIMUS

Scientific Name: *Cymopterus minimus* (Mathias) Mathias

Common Name: Cedar Breaks biscuitroot

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: *Aulospermum minimum* Mathias

Global Distribution: Endemic to Iron County, Utah

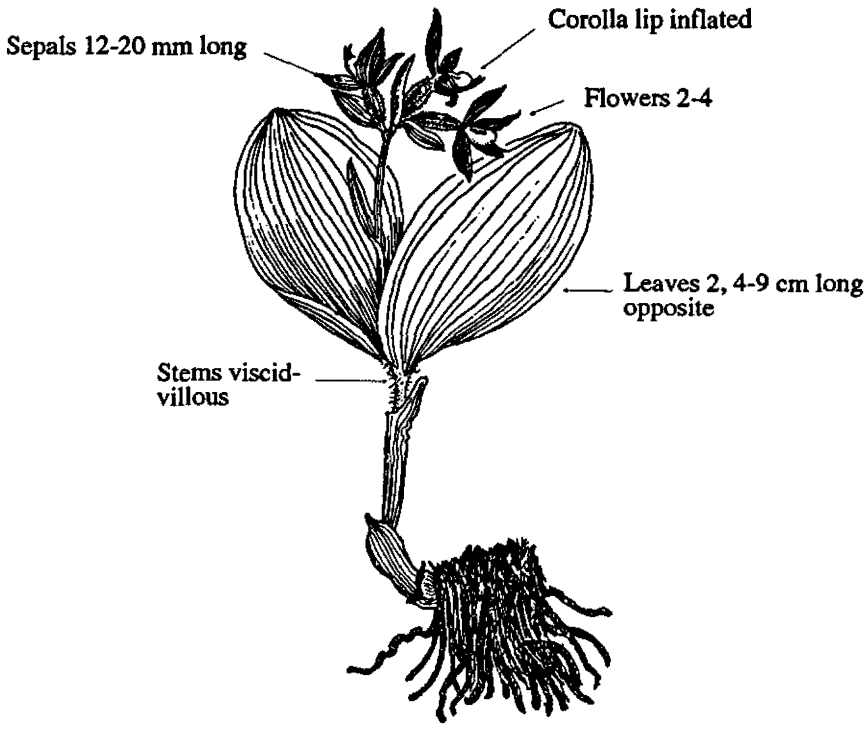
Management Responsibility: Cedar Breaks NM and Dixie NF?

Habitat: Bristlecone, ponderosa pine, and spruce-fir communities on Wasatch Limestone at 8,000 to 10,400 feet elevation, July-August.

Look-alikes: Confused with *C. purpureus*, but having creamy pink to pale purple petals when fresh, plants scabrous, with rays 2-18 mm long and pedicels to 3 mm long.

Habitat of Cymopterus minimus by K. Snyder

Species
Distribution



CYPRIPEDIUM FASCICULATUM

Scientific Name: *Cypripedium fasciculatum* Kellogg ex Wats.

Common Name: Brownie ladyslipper or Clustered lady's-slipper

Family (Common Name): Orchidaceae (Orchid Family)

Synonyms: *Cypripedium pusillum* Rolfe, *Cypripedium fasciculatum* Rolfe var. *pusillum* Hooker, *Cypripedium knightae* A. Nelson

Global Distribution: Known from Utah in Cache, Daggett, Salt Lake, Uintah, and Summit? counties; Montana, Idaho, Wyoming, and Colorado west to Washington, Oregon, and California

Management Responsibility: Ashley and Wasatch-Cache? NF's

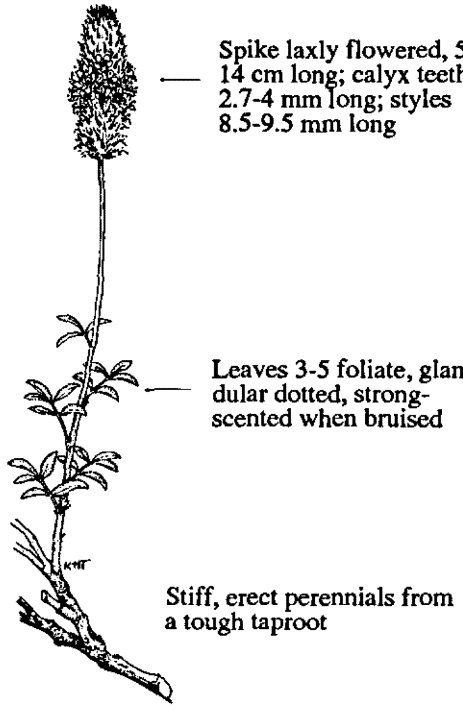
Habitat: Duff in spruce-fir or lodgepole pine forests and along shaded streams between 7,940 to 9,840 feet elevation, June-July.

Look-alikes: A distinct orchid with 2 broad, opposite leaves above the middle of the villous-viscid stem, 2-4 flowers in a tight cluster just above the leaves, and a purplish lip.

Closeup of Cypripedium fasciculatum by B. Franklin

Habitat of Cypripedium fasciculatum by B. Franklin

Species
Distribution


Spike laxly flowered, 5-14 cm long; calyx teeth 2.7-4 mm long; styles 8.5-9.5 mm long
Leaves 3-5 foliate, glandular dotted, strong-scented when bruised
Stiff, erect perennials from a tough taproot

DALEA FLAVESCENS VAR. *EPICA*

Scientific Name: *Dalea flavescens* (Wats.) Welsh var. *epica* (Welsh) Welsh and Chatterly

Common Name: Hole-in-the-Rock prarieclover

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Dalea epica* Welsh

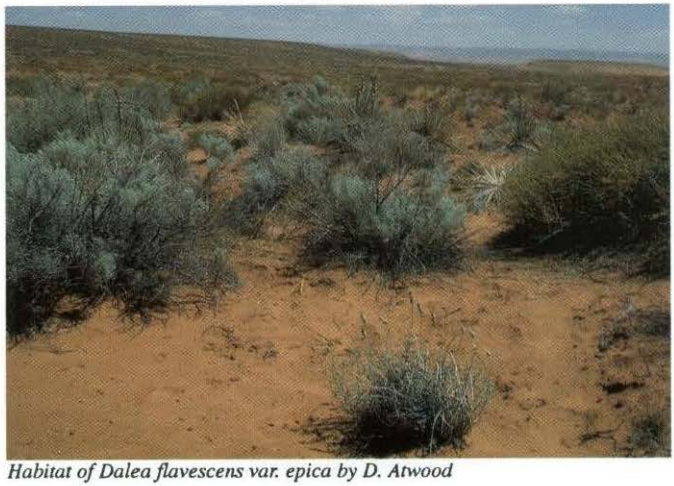
Global Distribution: Endemic to Utah in eastern Garfield, Kane and southwestern San Juan counties

Management Responsibility: BLM-Moab, Richfield and Cedar City Districts and Glen Canyon NRA

Habitat: Sandstone bedrock and sandy areas in blackbrush and mixed desert shrub communities between 4,690 to 5,010 feet elevation, May-June.

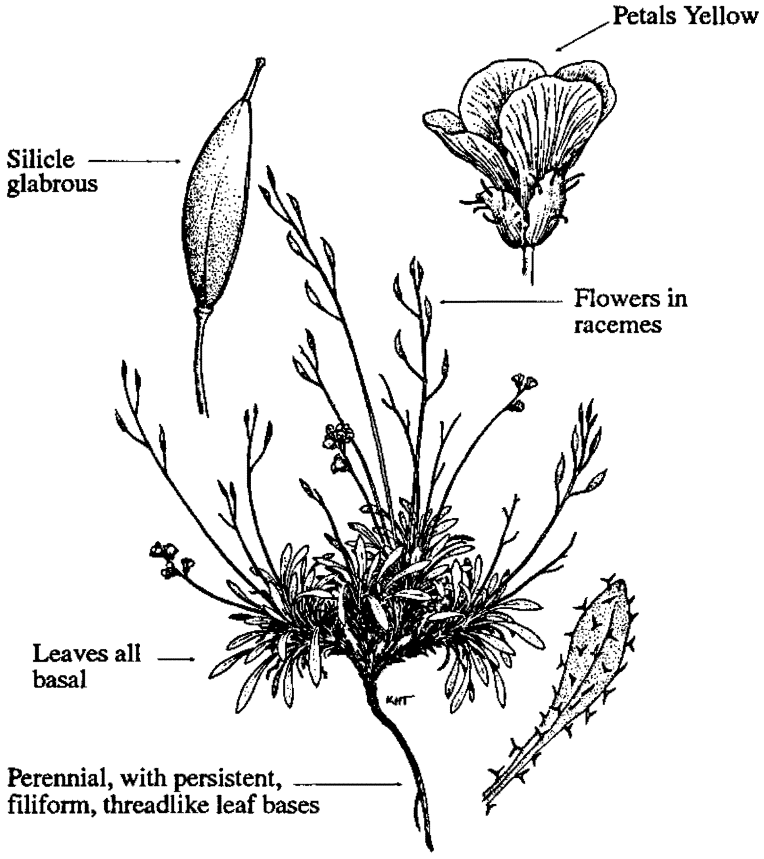
Look-alikes: Similar to var. *flavescens,* but recognized by its laxer flowering spikes, the longest 5-14 cm long, calyx teeth 2.7-4 mm long, pistils 11.5-13 mm long, and styles 8.5-9.5 mm long.

Closeup of Dalea flavescens var. epica by D. Atwood



Habitat of Dalea flavescens var. epica by D. Atwood

Species Distribution



DRABA KASSII

Scientific Name: *Draba kassii* Welsh

Common Name: Kass rockcress

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

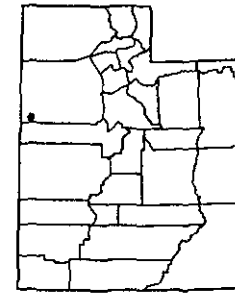
Global Distribution: Deep Creek Mountains, Tooele County, Utah; a Great Basin endemic

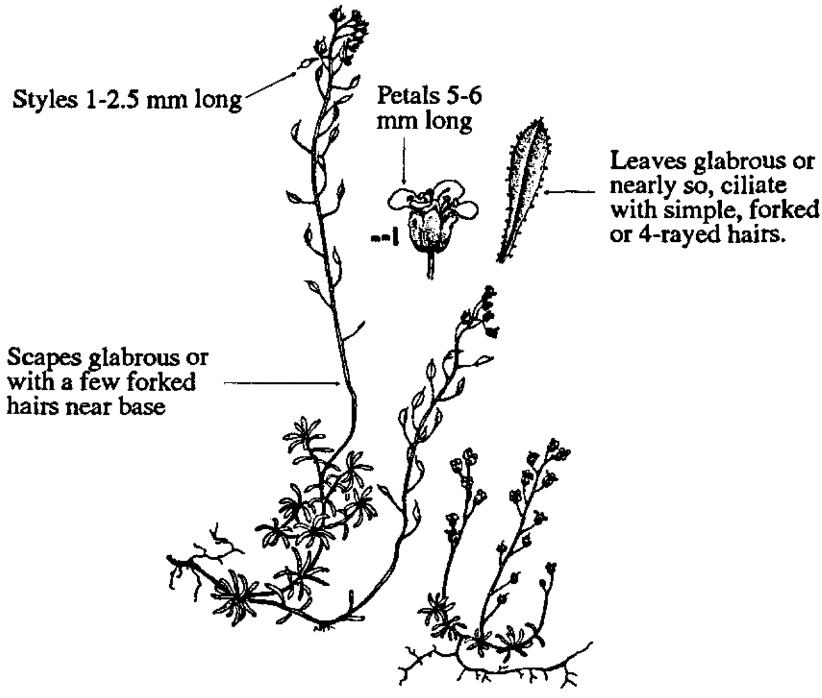
Management Responsibility: BLM-Salt Lake District

Habitat: Pinyon-juniper, white fir, and mountain brush communities, mainly in crevices in granite, at 7004 to 8005 feet in elevation, late April-early June.

Look-alikes: None

Species
Distribution




Styles 1-2.5 mm long
Petals 5-6 mm long
Leaves glabrous or nearly so, ciliate with simple, forked or 4-rayed hairs.
Scapes glabrous or with a few forked hairs near base

DRABA MAGUIREI

Scientific Name: *Draba maguirei* C. L. Hitchc.

Common Name: Maguire draba or Maguire rockcress

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: Draba maguirei var. burkei C.L. Hitchc.

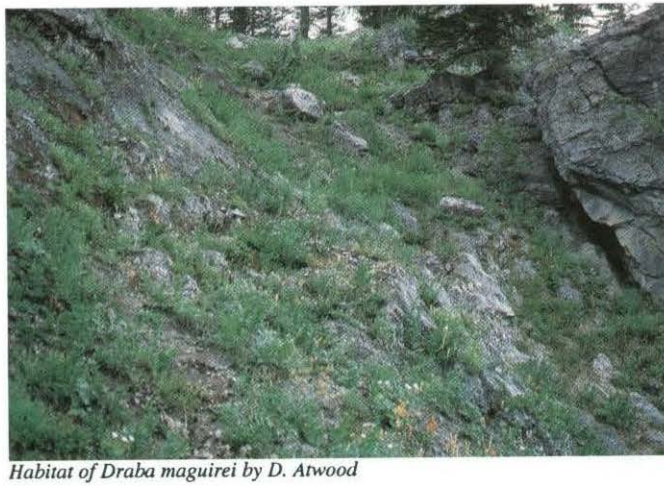
Global Distribution: Currently know only from Northern Utah in Box Elder, Cache and Weber counties; expected for southern Idaho

Management Responsibility: Wasatch-Cache NF

Habitat: Talus slopes and rocky outcrops, 5,400 to 8,700 feet elevation, May-June.

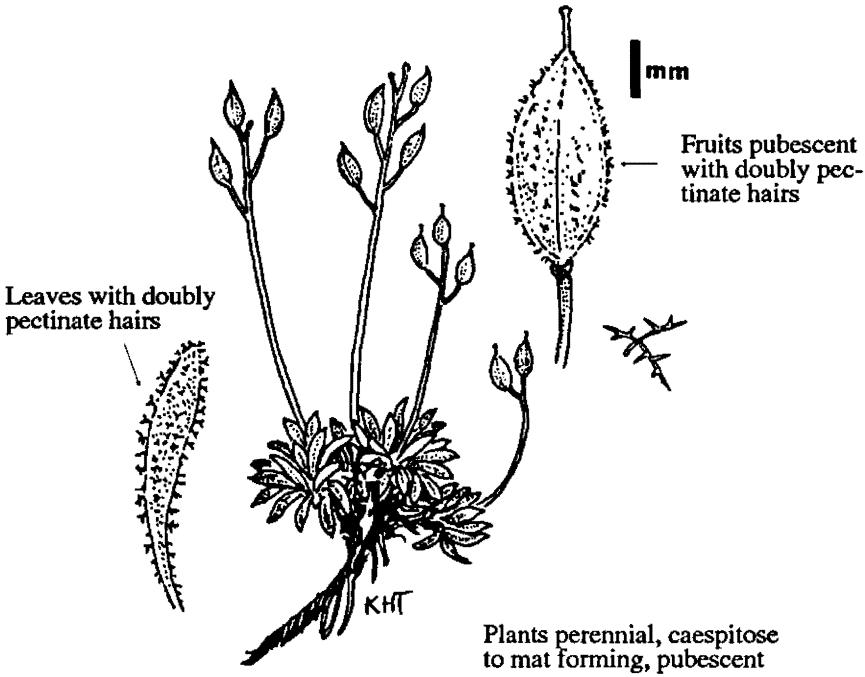
Look-alikes: A distinct species with the basal leaves 6-12 mm long, 9-14 mm wide, and siliques 4-10 mm long, and 1.5-3 mm wide.

Closeup of Draba maguirei by D. Atwood



Habitat of Draba maguirei by D. Atwood

Species Distribution


mm
Fruits pubescent with doubly pectinate hairs
Leaves with doubly pectinate hairs
KHT
Plants perennial, caespitose to mat forming, pubescent

DRABA PECTINIPHILA

Scientific Name: *Draba pectiniphila* Rollins

Common Name: Woods draba

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Draba oligosperma* Hook var. *juniperina* (Dorn) Welsh, *Draba oligosperma* Hook var. *pectiniphila* (Rollins) C.L. Hitchc., *Draba juniperina* Dorn

Global Distribution: Bridger Basin, Uinta Mountains, Uintah and Daggett counties, Utah and Wyoming

Management Responsibility: Dinosaur NM, BLM-Vernal District and private

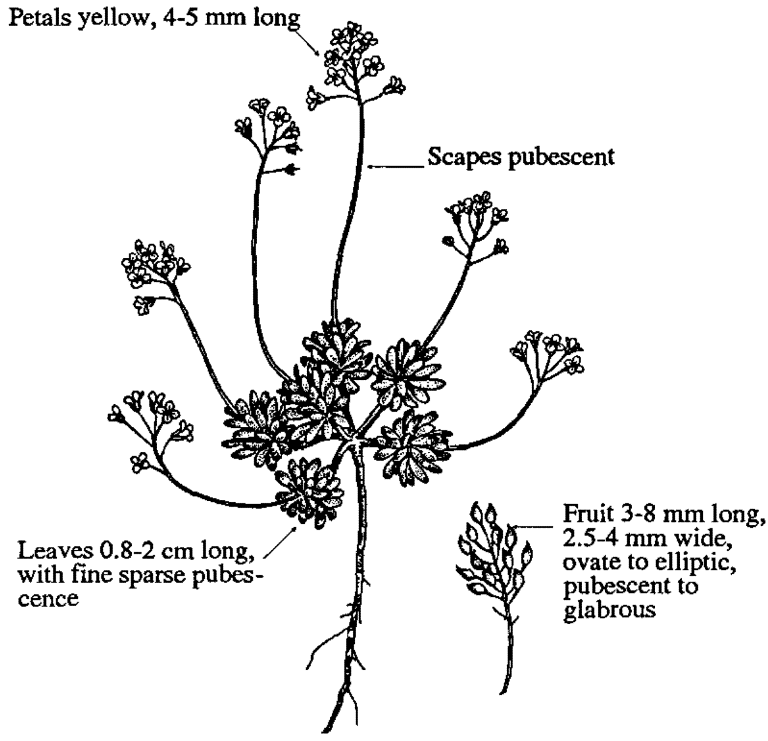
Habitat: Pinyon-juniper, sagebrush, mountain brush, ponderosa pine and Douglas fir communities on rocky slopes in heavy clay soil, 6,300-10,500 feet elevation, May-June.

Look-alikes: Similar to *D. oligosperma*, but having white petals, plants taller, and with partly doubly pectinate hairs on the silicles.

Habitat of Draba pectiniphila by D. Atwood

Closeup of Draba pectiniphila by D. Atwood

Species
Distribution


Petals yellow, 4-5 mm long
Scapes pubescent
Leaves 0.8-2 cm long, with fine sparse pubescence
Fruit 3-8 mm long, 2.5-4 mm wide, ovate to elliptic, pubescent to glabrous

DRABA SOBOLIFERA

Scientific Name: *Draba sobolifera* Rydb.

Common Name: Creeping draba or subalpine whitlowgrass

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Draba uncinalis* Rydb., *Draba sobolifera* Rydb. var. *uncinalis* (Rydb.) Schulz, *Draba ramulosa* Rollins

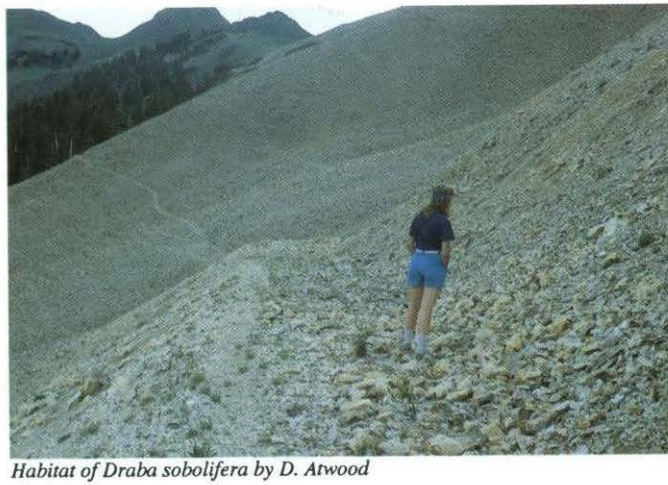
Global Distribution: Endemic to the Tushar Mountains of Beaver, Garfield and Piute counties in South-central Utah

Management Responsibility: Fishlake and Dixie NF's and private

Habitat: Alpine tundra and spruce fir communities in igneous gravels and talus between 7,500 to 12,000 feet elevation, July-August.

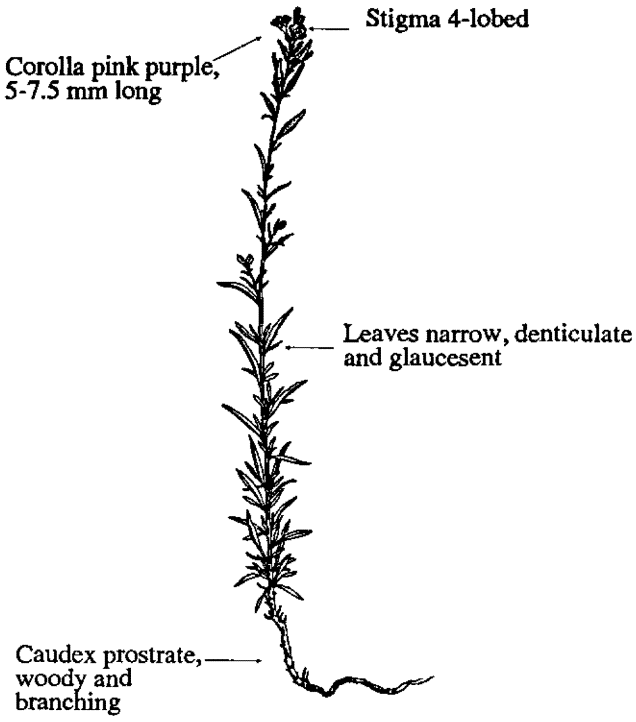
Look-alikes: Most closey related to *D. ventosa* which differs in having densely cinereus pubescence, the individual hairs almost indistinguishable, and by distribution (*ventosa* is known only from the Uinta Mountains).

Closeup of Draba sobolifera by D. Atwood



Habitat of Draba sobolifera by D. Atwood

Species
Distribution


Stigma 4-lobed
Corolla pink purple, 5-7.5 mm long
Leaves narrow, denticulate and glaucesent
Caudex prostrate, woody and branching

EPILOBIUM NEVADENSE

Scientific Name: *Epilobium nevadense* Munz

Common Name: Nevada willowherb

Family (Common Name): Onagraceae (Evening-Primrose Family)

Synonyms: None

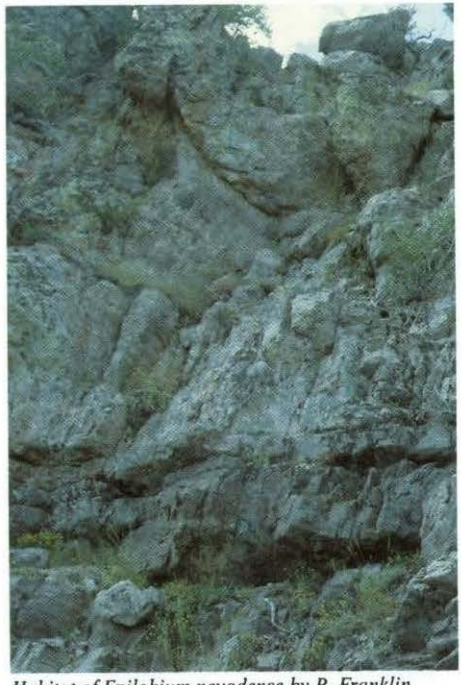
Global Distribution: Southwestern and west-central Utah in Millard and Washington counties; Charleston Mountains in southern Nevada

Management Responsibility: Fishlake NF, BLM-Cedar City and Richfield? Districts and Zion NP

Habitat: Creosote bush and pinyon-juniper communities between 2,985 to 8,800 feet elevation, June-September.

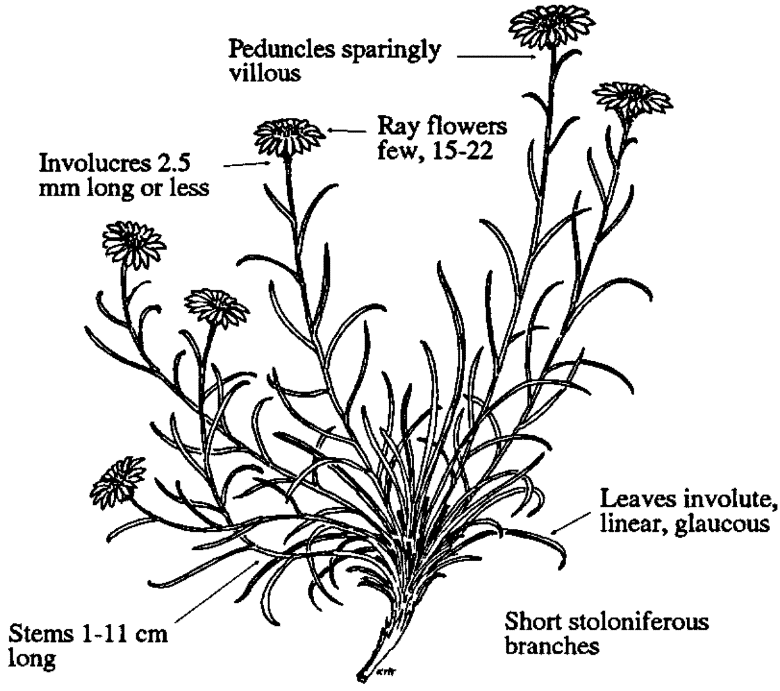
Look-alikes: A distinct low growing, several stemmed, suffrutescent perennial from persistent woody branches, 4-lobed stigma. Growing on arid sites.

Closeup of Epilobium nevadense by B. Franklin



Habitat of Epilobium nevadense by B. Franklin

Species
Distribution


Peduncles sparingly villous
Ray flowers few, 15-22
Involucres 2.5 mm long or less
Leaves involute, linear, glaucous
Stems 1-11 cm long
Short stoloniferous branches

ERIGERON CANAANI

Scientific Name: *Erigeron canaani* Welsh

Common Name: Canaan daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

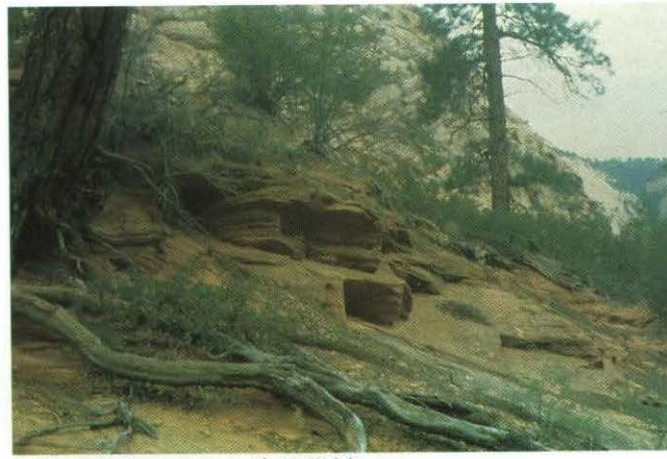
Synonyms: None

Global Distribution: Endemic to eastern Washington County, Utah

Management Responsibility: BLM-Cedar City District and Zion NP

Habitat: Ponderosa pine community at 5,200 to 6,800 feet elevation, September-early October.

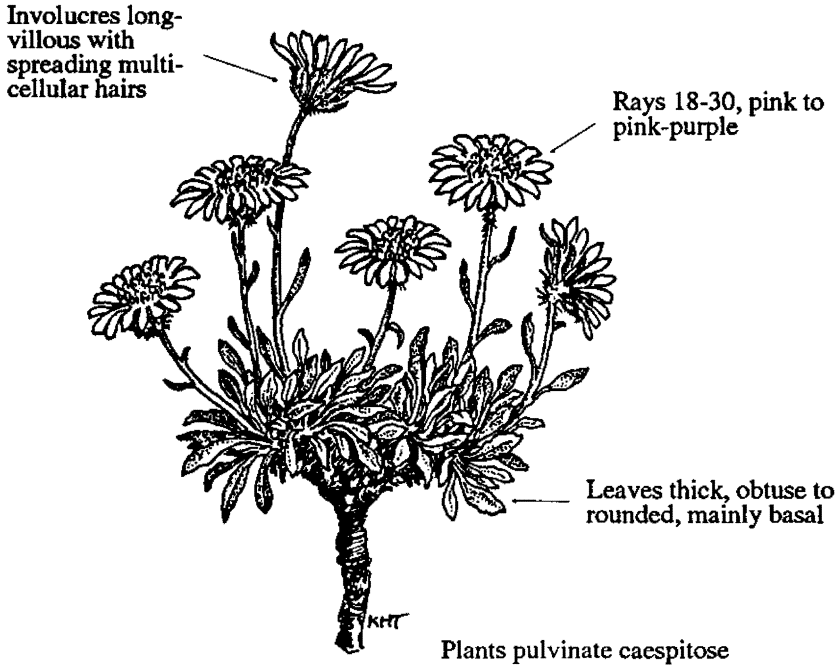
Look-alikes: Similar to *E. eatonii* in general aspect, but having involute, linear, glaucous leaves and few ray flowers.



Habitat of Erigeron canaani by S. Welsh

Closeup of Erigeron canaani by S. Welsh

Species
Distribution


Involucres long-villous with spreading multi-cellular hairs
Rays 18-30, pink to pink-purple
Leaves thick, obtuse to rounded, mainly basal
Plants pulvinate caespitose

ERIGERON CARRINGTONAE

Scientific Name: *Erigeron carringtonae* Welsh

Common Name: Carrington daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

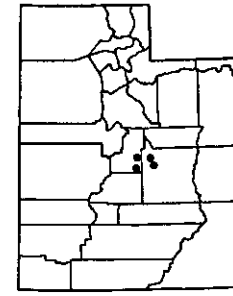
Global Distribution: Endemic to Emery and Sanpete counties, Utah

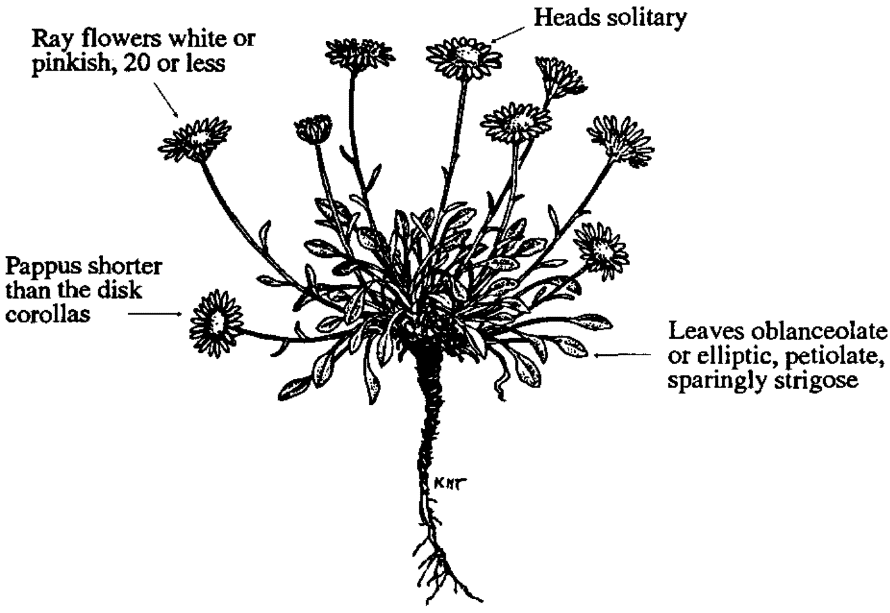
Management Responsibility: Manti-LaSal NF

Habitat: Meadows and escarpment margins on Flagstaff limestone between 10,000 and 11,000 feet elevation, July-early August.

Look-alikes: Similar in appearance to *E. simplex,* but differs in its pulvinate caespitose habit and thick obtuse to rounded leaves.

Species
Distribution




Heads solitary
Ray flowers white or pinkish, 20 or less
Pappus shorter than the disk corollas
Leaves oblanceolate or elliptic, petiolate, sparingly strigose
KNT

ERIGERON CRONQUISTII

Scientific Name: *Erigeron cronquistii* Maguire

Common Name: Cronquist daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

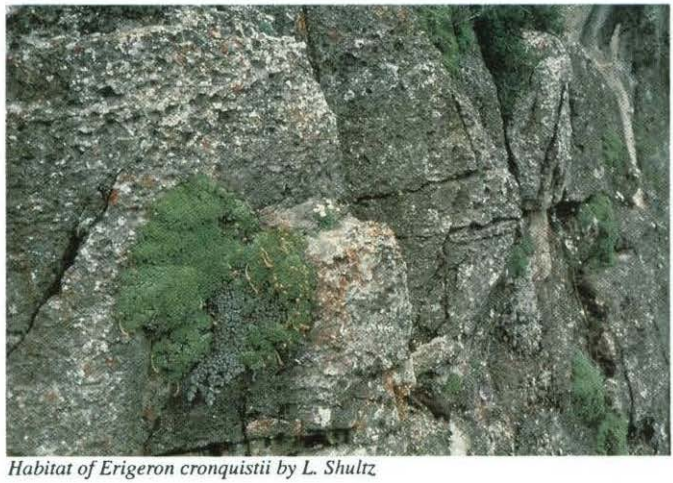
Global Distribution: Presently known only from Cache County, Utah, but likely in adjacent Idaho

Management Responsibility: Wasatch-Cache NF, Utah Division of Transportion, BLM-Salt Lake District and State Trust Lands

Habitat: Crevices in limestone cliffs and talus between 5,740 to 9,880 feet elevation, May-August.

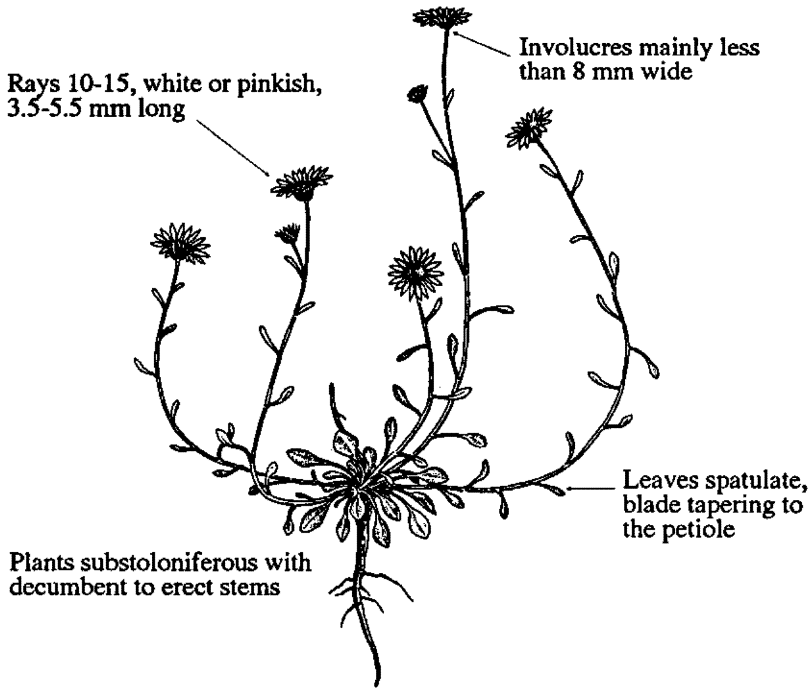
Look-alikes: Similar to *E. tener*, but with obtuse to rounded basal leaves vs acute to acutish, white to pink rays vs blue to red-purple, and the pappus shorter than the disk corollas vs subequal in *E. tener.*

Closeup of Erigeron cronquistii by D. Atwood



Habitat of Erigeron cronquistii by L. Shultz

Species
Distribution


Involucres mainly less than 8 mm wide
Rays 10-15, white or pinkish, 3.5-5.5 mm long
Leaves spatulate, blade tapering to the petiole
Plants substoloniferous with decumbent to erect stems

ERIGERON KACHINENSIS

Scientific Name: *Erigeron kachinensis* Welsh & Moore

Common Name: Kachina daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

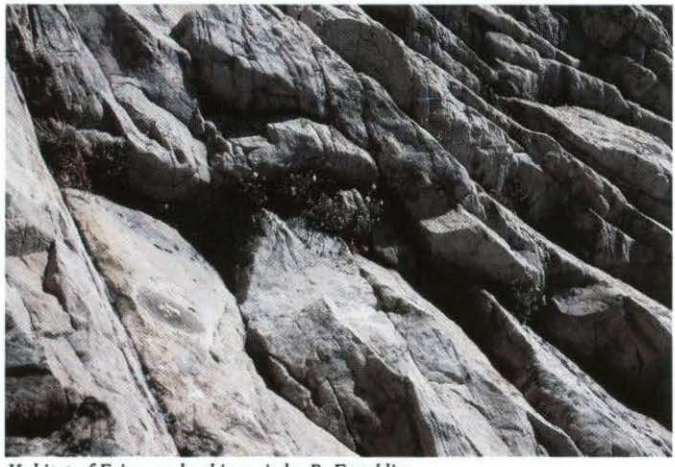
Global Distribution: San Juan County, Utah and Montrose County, Colorado

Management Responsibility: Manti-LaSal NF, Natural Bridges NM, Glen Canyon NRA?, BLM-Moab District and State

Habitat: Seeps, hanging gardens, and open slickrock at higher elevations, between 5,345 to 8,400 feet elevation, May-July (August).

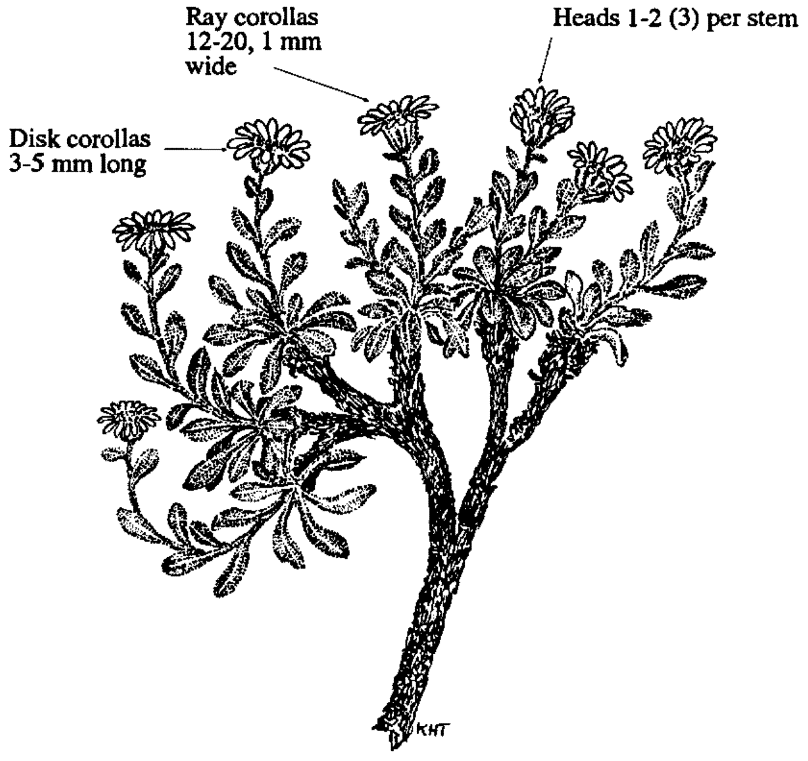
Look-alikes: Closely related to *E. subglaber*, which differs in lacking pubescence, taller stature, smaller, less numerous ligules and flowering heads.

Closeup of Erigeron kachinensis by D. Atwood



Habitat of Erigeron kachinensis by B. Franklin

Species
Distribution



ERIGERON MAGUIREI VAR. *HARRISONII*

Scientific Name: *Erigeron maguirei* Cronq. var. *harrisonii* Welsh

Common Name: Harrisons' daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

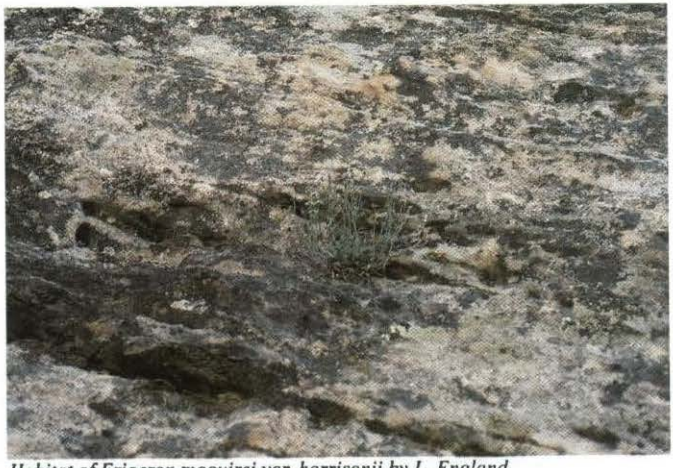
Global Distribution: Endemic to Garfield County, Utah

Management Responsibility: Capitol Reef NP

Habitat: Dry, rocky, sandy canyon bottoms in the Navajo and Wingate Sandstone Formations in mountain shrub and lower limits of the juniper woodland communities between 5,600 to 7,200 feet elevation, June-July.

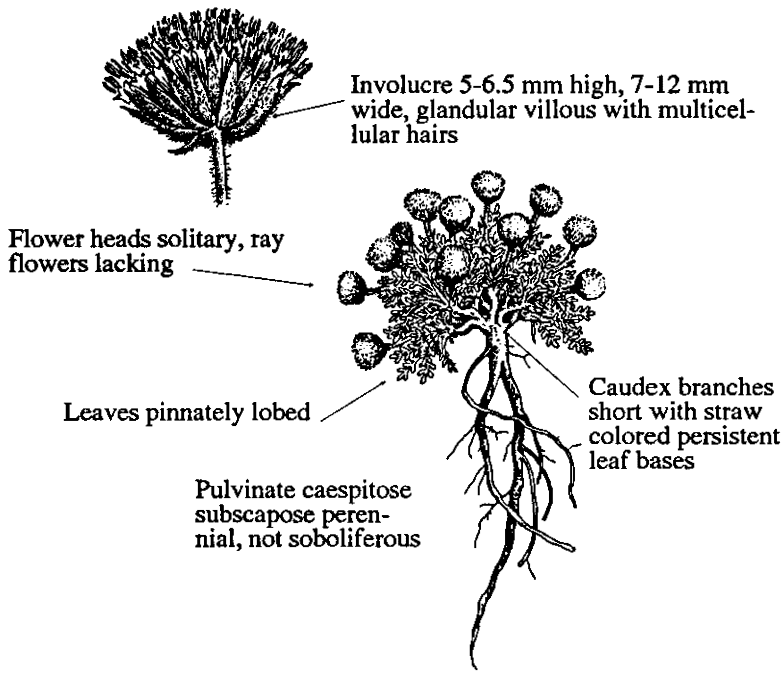
Look-alikes: This variety is distinguished from the typical variety by its more numerous heads per stem, its narrower ray corollas, and shorter disk corollas. Also, related to *E. caespitosus*, *E. jonesii*, and *E. ovinus*, but its leaves are only faintly, if at all, three nerved. Its few ligules and hirsute pubescence separate it.

Closeup of Erigeron maguirei var. harrisonii by L. England



Habitat of Erigeron maguirei var. harrisonii by L. England

Species Distribution


Involucre 5-6.5 mm high, 7-12 mm wide, glandular villous with multicellular hairs
Flower heads solitary, ray flowers lacking
Leaves pinnately lobed
Caudex branches short with straw colored persistent leaf bases
Pulvinate caespitose subscapose perennial, not soboliferous

ERIGERON MANCUS

Scientific Name: *Erigeron mancus* Rydb.

Common Name: LaSal daisy

Family (Common Name): Asteraceae of Compositae (Sunflower Family)

Synonyms: *Erigeron pinnatisectus* (Gray) A. Nels. var. *insolens* Macbr. & Pays.

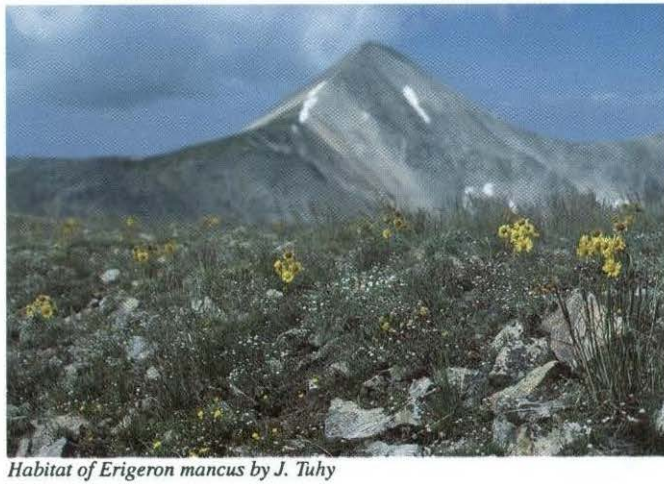
Global Distribution: Endemic to the LaSal Mountains of San Juan and Grand counties, Utah

Management Responsibility: Manti-LaSal NF

Habitat: Alpine grass-sedge and forb communities at 9,150 to 10,500 feet elevation, July-August.

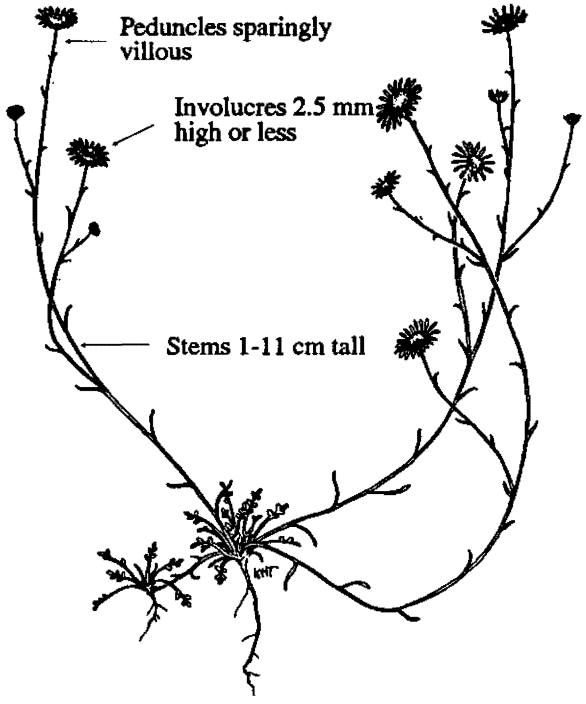
Look-alikes: Similar to *E. compositus* and *E. vagus*, but distinct in having pinnately lobed leaves vs toothed or lobed in *E. vagus*, palmately lobed in *E. compositus*, and complete absence of ray flowers (rayless forms also in *E. compositus*).

Closeup of Erigeron mancus by B. Franklin



Habitat of Erigeron mancus by J. Tuhy

Species
Distribution



ERIGERON SIONIS

Scientific Name: *Erigeron sionis* Cronq.

Common Name: Zion daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Known only from Washington and Kane counties, Utah

Management Responsibility: Zion NP and BLM-Cedar City District

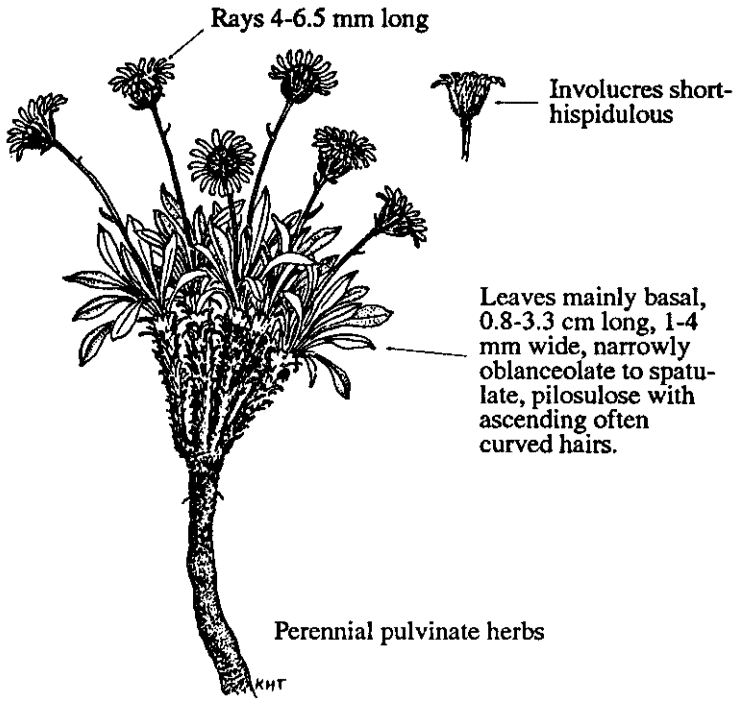
Habitat: Seeps and hanging gardens in ponderosa pine and riparian communities in Navajo and Wingate sandstones at 4,420 to 5,250 feet elevation, Late April-June (September, October, November).

Look-alikes: Similar to *E. proselyticus*, but different in having the involucres 2.5 mm high or less, stems 1-11 cm tall, and sparingly villous peduncles.

Closeup of Erigeron sionis by S. Welsh

Habitat of Erigeron sionis by S. Welsh

Species Distribution


Rays 4-6.5 mm long
Involucres short-hispidulous
Leaves mainly basal, 0.8-3.3 cm long, 1-4 mm wide, narrowly oblanceolate to spatulate, pilosulose with ascending often curved hairs.
Perennial pulvinate herbs
KHT

ERIGERON UNTERMANNII

Scientific Name: *Erigeron untermannii* Welsh & Goodrich

Common Name: Untermann daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

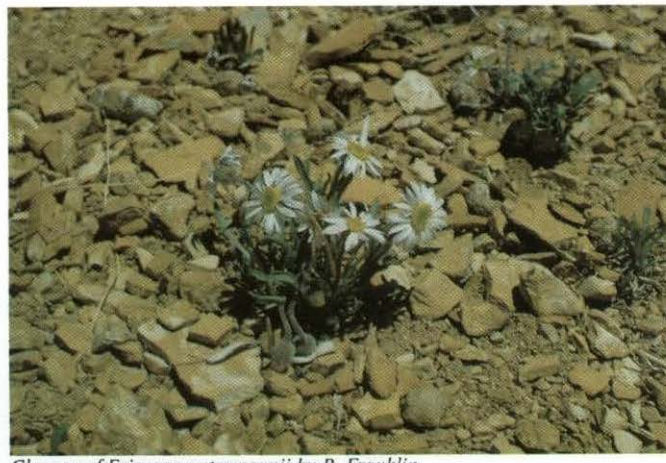
Synonyms: None

Global Distribution: Endemic to Utah in Duchesne County

Management Responsibility: Ashley NF, Ute TL-North Unit, State Trust Lands and private

Habitat: Pinyon-juniper community on calcareous shales and sandstones of the Uinta and Green River formations between 7,000 to 7,810 feet elevation, May-June.

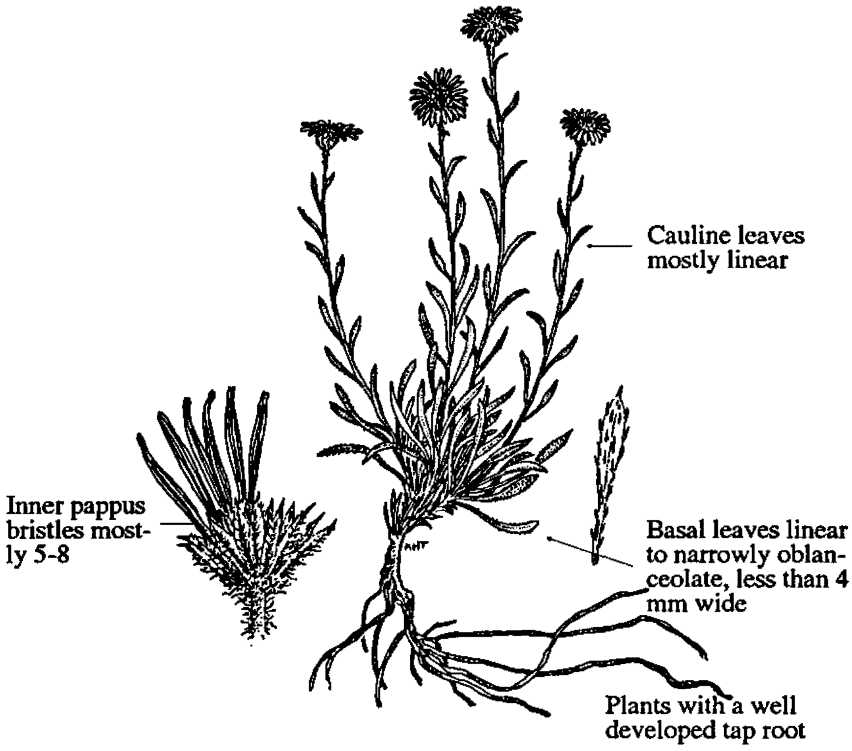
Look-alikes: Close to *E. compactus* and *E. nematophyllus,* but easily recognized by the narrowly but conspicuously oblanceolate leaves, often hyaline margins and less uniformly linear involucral bracts (the inner broader, 1-1.5 mm wide).



Closeup of Erigeron untermannii by B. Franklin

Habitat of Erigeron untermannii by B. Franklin

Species
Distribution


Cauline leaves mostly linear
Inner pappus bristles mostly 5-8
Basal leaves linear to narrowly oblanceolate, less than 4 mm wide
Plants with a well developed tap root

ERIGERON ZOTHECINUS

Scientific Name: *Erigeron zothecinus* Welsh

Common Name: Alcove daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

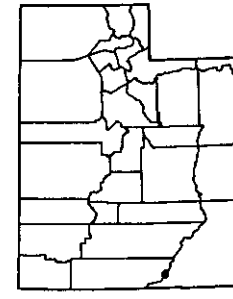
Global Distribution: Endemic to eastern Kane County, Utah

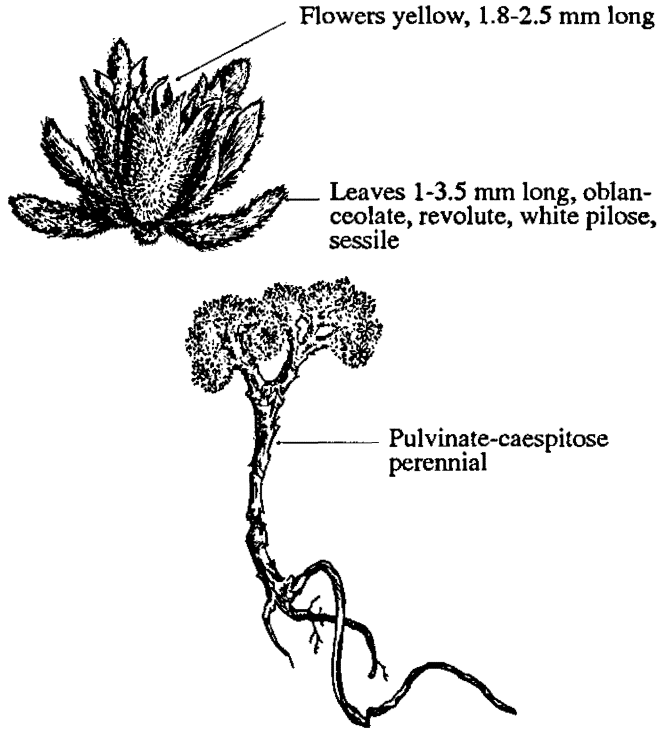
Management Responsibility: Glen Canyon NRA

Habitat: Saline seeps and gardens on sandstone walls at 3,690 to 3,800 feet elevation, late May-June.

Look-alikes: A distinct species with linear to narrowly oblanceolate basal leaves less than 4 mm wide, cauline leaves mostly linear and the inner pappus bristles mostly 5-8.

Species
Distribution




Flowers yellow, 1.8-2.5 mm long
Leaves 1-3.5 mm long, oblanceolate, revolute, white pilose, sessile
Pulvinate-caespitose perennial

ERIOGONUM ARETIOIDES

Scientific Name: *Eriogonum aretioides* Barneby

Common Name: Widtsoe buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: None

Global Distribution: Endemic to Garfield County, Utah

Management Responsibility: Dixie NF, Bryce Canyon NP, private and State Trust Lands?

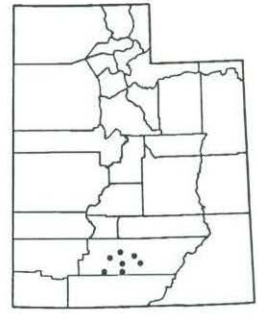
Habitat: Bristlecone pine, ponderosa pine, Douglas fir, and Rocky Mountain juniper communities on the Pink Limestone member of the Wasatch Formation between 7,400 to 8,710 feet elevation, (late May) June-August.

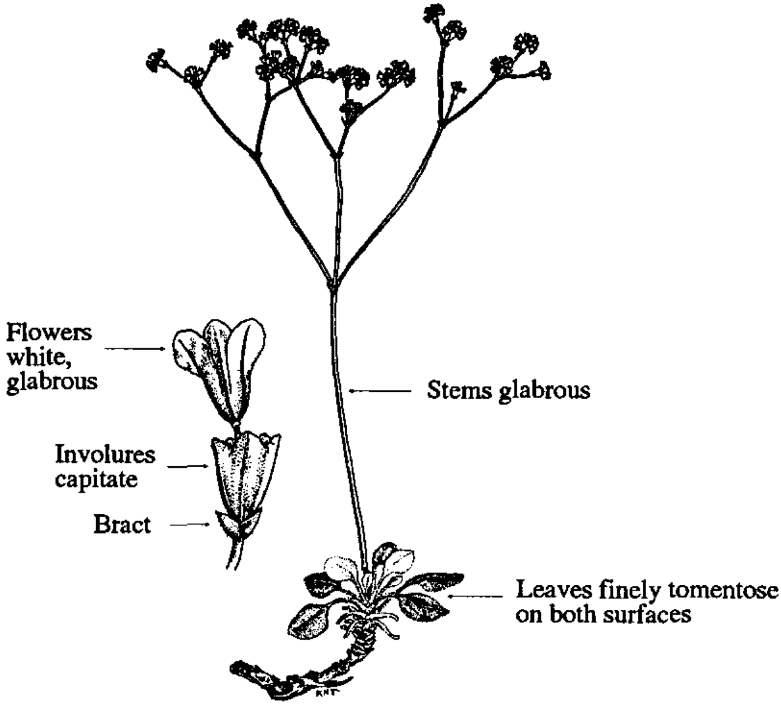
Look-alikes: A distinct pulvinate-caespitose perennial forming mounds (resembling half a cantaloupe in flower), with yellow flowers 1.8-2.5 mm long and 4-lobed involucres.

Closeup of Eriogonum aretiodes by D. Atwood

Habitat of Eriogonum aretiodes by D. Atwood

Species
Distribution





ERIOGONUM BATEMANII VAR. *EREMICUM*

Scientific Name: *Eriogonum batemanii* Jones var. *eremicum* (Reveal) Welsh

Common Name: Hermit buckwheat or Limestone buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *Eriogonum eremicum* Reveal

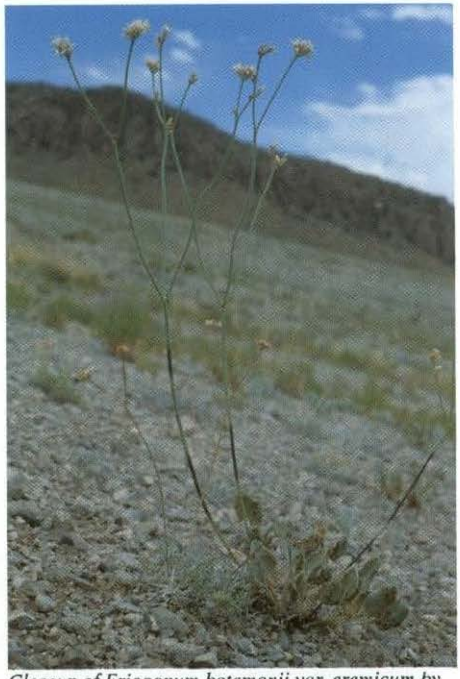
Global Distribution: Endemic to Beaver and Millard counties, Utah

Management Responsibility: Desert Range Experiment Station and BLM-Richfield and Cedar City Districts

Habitat: Shadscale, desert shrub, and juniper communities on limestone and dolomite gravels between 5,100 to 6,315 feet elevation, June-September.

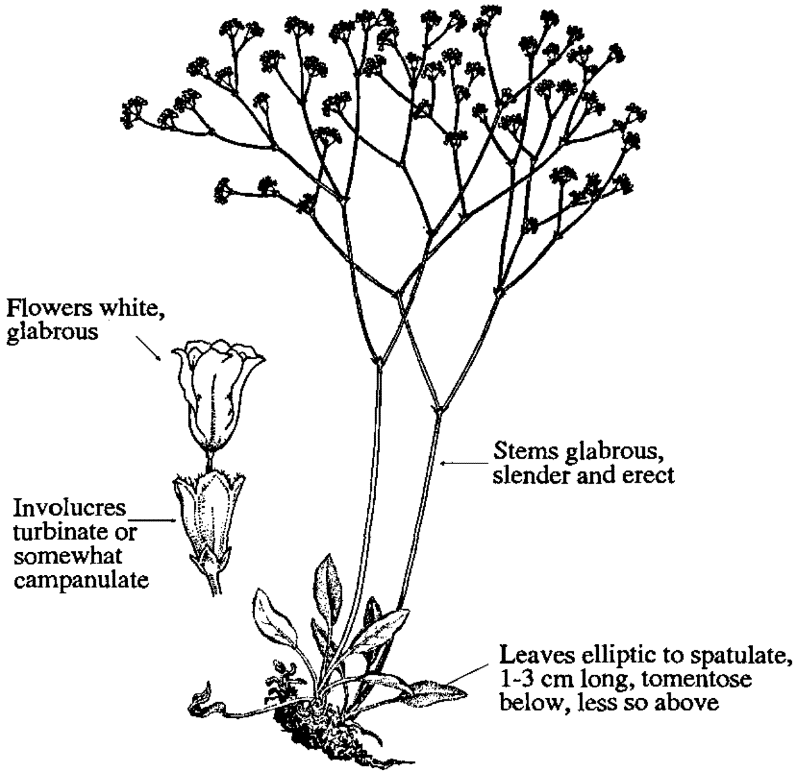
Look-alikes: Differing from the other varieties by the capitate involucres, mainly 2-5, terminatiang long naked branches.

Habitat of Eriogonum batemanii var. eremicum by D. Atwood



Closeup of Eriogonum batemanii var. eremicum by D. Atwood

Species Distribution


Flowers white, glabrous
Involucres turbinate or somewhat campanulate
Stems glabrous, slender and erect
Leaves elliptic to spatulate, 1-3 cm long, tomentose below, less so above

ERIOGONUM BATEMANII VAR. *OSTLUNDII*

Scientific Name: *Eriogonum batemanii* Jones var. *ostlundii* (Jones) Welsh

Common Name: Elsinore buckwheat or Ostlund buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *Eriogonum ostlundii* Jones, *Eriogonum spathuliforme* Rydb.

Global Distribution: Endemic to Piute and Sevier counties, Utah

Management Responsibility: Fishlake NF, BLM-Richfield District, State and private

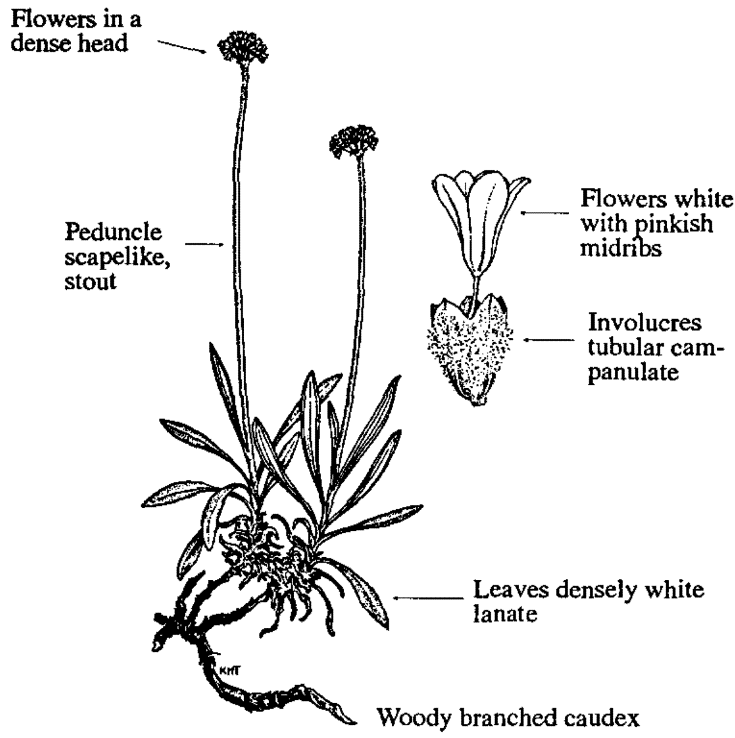
Habitat: Shadscale, mixed desert shrub, sagebrush, juniper, and ponderosa pine communities often on igneous gravels between 5,495 to 6,512 feet elevation, July-September.

Look-alikes: Similar to the other varieties of *batemanii,* but differing in the cymose involucres with mostly 1-5 in branching terminal cymes on short branches.

Closeup of Eriogonum batemannii var. ostlundii by D. Atwood

Habitat of Eriogonum batemannii var. ostlundii by D. Atwood

Species Distribution



ERIOGONUM BREVICAULE VAR. *LOGANUM*

Scientific Name: *Eriogonum brevicaule* Nutt. var. *loganum* (A. Nels.) Welsh

Common Name: Logan buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *Eriogonum loganum* A. Nels, *E. chrysocephalum* ssp. *loganum* (A. Nels.) Stokes

Global Distribution: Endemic to Utah in Cache, Rich, and Morgan counties

Management Responsibility: Wasatch-Cache NF and private

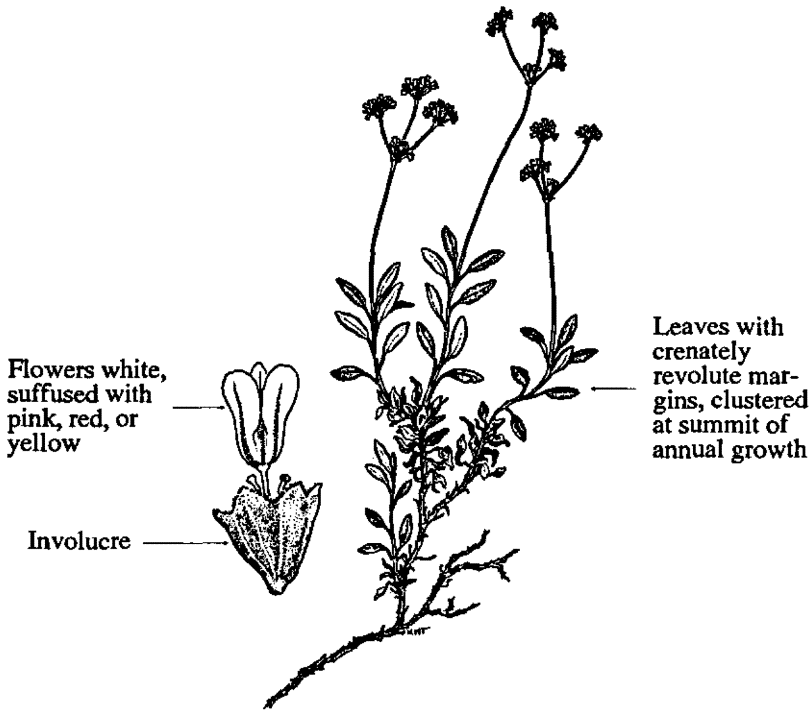
Habitat: Sagebrush-bunchgrass and rocky outcrop communities between 4,790 to 7,790 feet elevation, May-June.

Look-alikes: Differing from other varieties of *brevicaule* in being short caulescent and the internodes obscured by a white tomentum.

Closeup of Eriogonum brevicaule var. loganum by D. Atwood

Habitat of Eriogonum brevicaule var. loganum by D. Atwood

Species Distribution


Flowers white, suffused with pink, red, or yellow
Involucre
Leaves with crenately revolute margins, clustered at summit of annual growth

ERIOGONUM CORYMBOSUM VAR. *CRONQUISTII*

Scientific Name: *Erigonum corymbosum* Benth. var. *cronquistii* (Reveal) Welsh

Common Name: Cronquist buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *E. cronquistii* Reveal

Global Distribution: Henry Mountains, Garfield County, Utah; a Colorado Plateau endemic

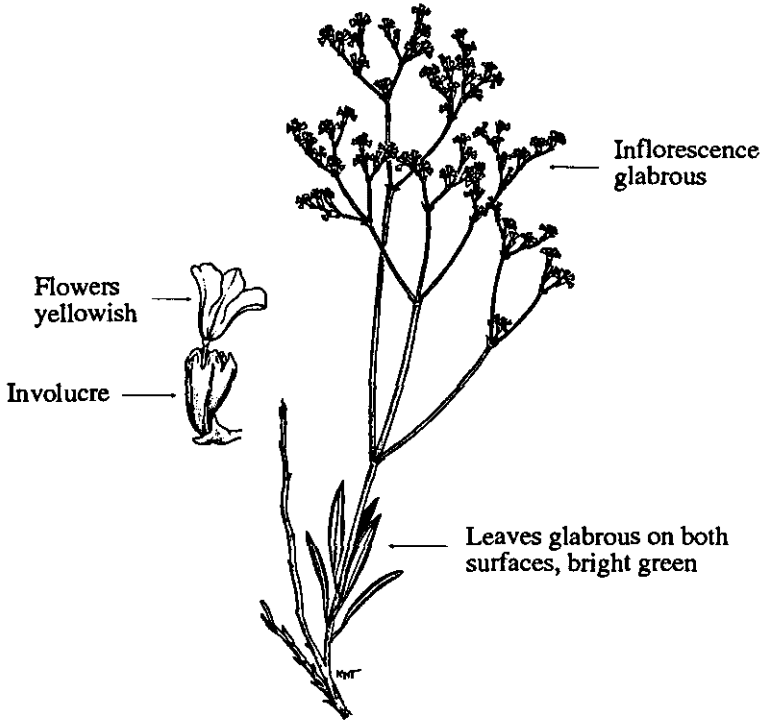
Management Responsibility: BLM-Richfield District

Habitat: Pinyon, holodiscus, rabbitbrush, and rock-spiraea communities at 8,500 to 9,150 feet elevation, September.

Look-alikes: The Cronquist buckwheat is closely allied to *E. corymbosum* var. *revealianum*. The two varieties share the feature of leaves clustered at the summit of the annual growth, which is much surpassed in length by the inflorescence. The Cronquist buckwheat is also similar morphologically to var. *humivagans*, but differs in having crenately revloute leaf margins.

Closeup of Eriogonum corymbosum var. cronquistii by S. Welsh

Species
Distribution



ERIGONOUM CORYMBOSUM VAR. *SMITHII*

Scientific Name: *Erigonum corymbosum* Benth. var. *smithii* (Reveal) Welsh

Common Name: Big Flattop buckwheat or Smith wild buchwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *Eriogonum smithii* Reveal

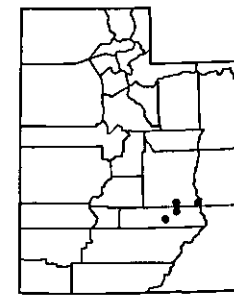
Global Distribution: Emery and Wayne Counties, Utah; a Colorado Plateau endemic

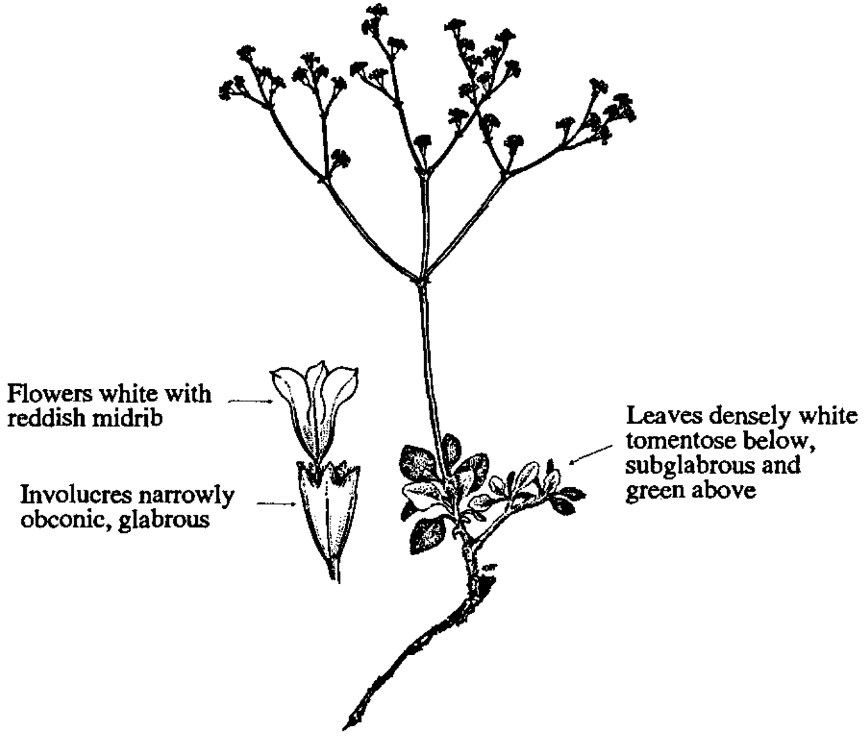
Management Responsibility: BLM-Moab and Richfield Districts, Canyonlands NP?

Habitat: Purple-sage, matchweed, ephedra-Indian ricegrass, and rabbitbrush communities, on the Entrada Formation and on stabilized dunes at 5,200 to 5,610 feet elevation, August-September.

Look-alikes: The plant is similar in its yellow flowers to *E. corymbosum* var. *aureum*, but differs in having leaves and inflorescences glabrous.

Species
Distribution




Flowers white with reddish midrib
Involucres narrowly obconic, glabrous
Leaves densely white tomentose below, subglabrous and green above

ERIOGONUM NUMMULARE VAR. *AMMOPHILUM*

Scientific Name: *Eriogonum nummulare* Jones var. *ammophilum* (Reveal) Welsh

Common Name: Ibex buckwheat or sand-loving buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: *Eriogonum ammophilum* Reveal

Global Distribution: Endemic to Utah in Millard County

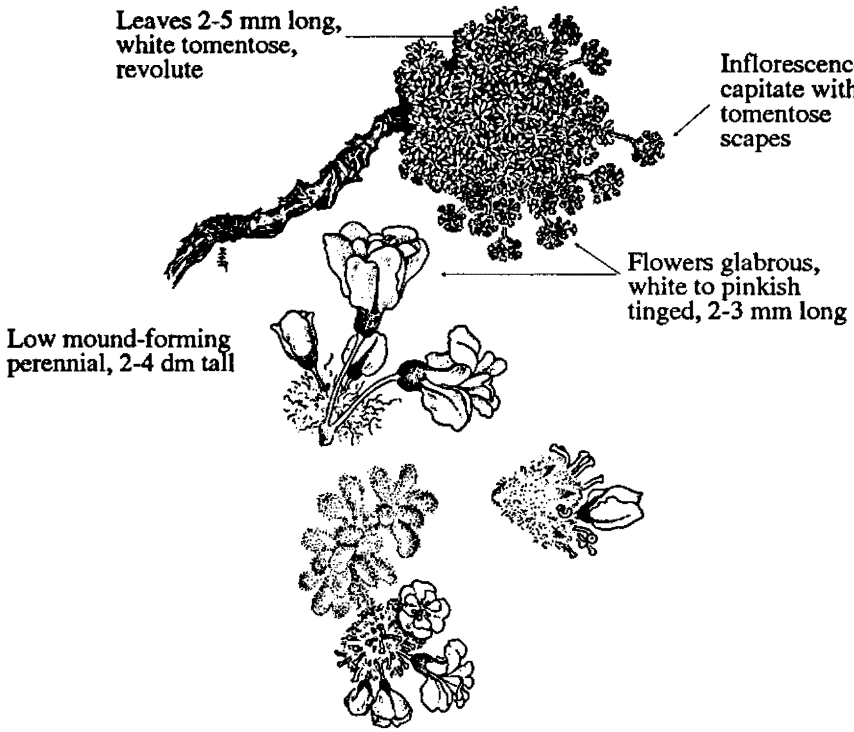
Management Responsibility: Desert Range Experiment Station, BLM-Richfield District, State Trust Lands and private

Habitat: Desert shrub community, sandy soil, between 5,000 to 5,500 feet elevation, late June-mid-August.

Look-alikes: Close to var. *nummulare*, but having glabrous inflorescences and glabrous, narrowly obconic involucres.

Closeup of Eriogonum nummulare var. ammophilum by S. Welsh

Species
Distribution


Leaves 2-5 mm long, white tomentose, revolute
Inflorescence capitate with tomentose scapes
Flowers glabrous, white to pinkish tinged, 2-3 mm long
Low mound-forming perennial, 2-4 dm tall

ERIGONOUM SOREDIUM

Scientific Name: *Erigonum soredium* Reveal

Common Name: Frisco buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Synonyms: None

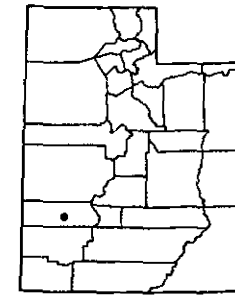
Global Distribution: Beaver County, Utah; a Great Basin endemic

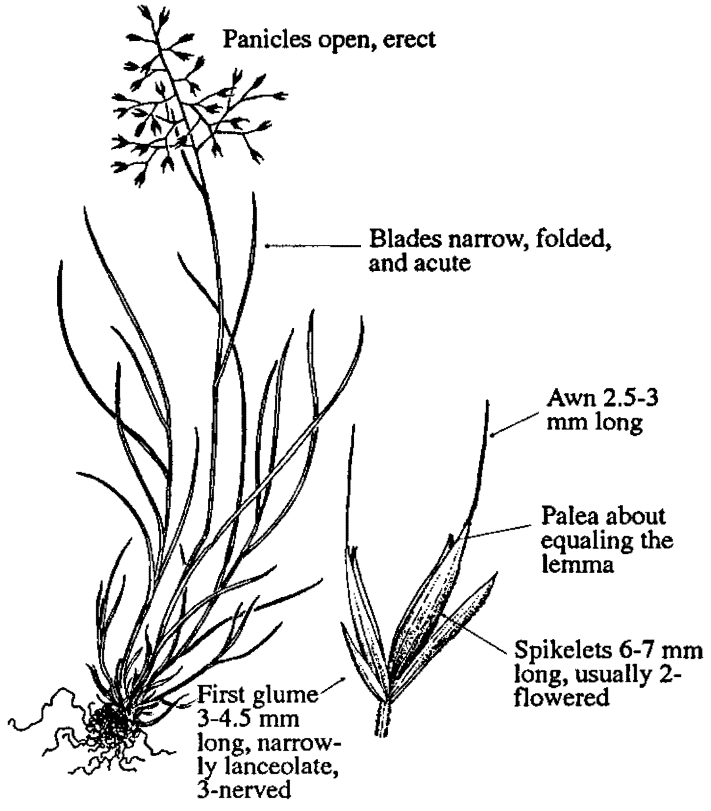
Management Responsibility: BLM-Cedar City District, private

Habitat: Sagebrush and juniper communities, on white limestone outcrops, at 6,600 to 7,300 feet elevation, June-August.

Look-alikes: The plant tends to grow as if plastered to limestone outcrops. It is similar to other low-growing, mound-forming members of the genus. The combination of elongate leaves, tomentose scapes (when present), and glabrous flowers will serve to distinquish this species from other similar species of *Eriogonum.*

Species
Distribution




Panicles open, erect
Blades narrow, folded, and acute
Awn 2.5-3 mm long
Palea about equaling the lemma
Spikelets 6-7 mm long, usually 2-flowered
First glume 3-4.5 mm long, narrowly lanceolate, 3-nerved

FESTUCA DASYCLADA

Scientific Name: *Festuca dasyclada* Hackel ex Beal

Common Name: Sedge fescue

Family (Common Name): Poaceae or Gramineae (Grass Family)

Synonyms: *Argillochloa dasyclada* (Hackel ex Beal) W.A. Weber

Global Distribution: Central and south-central Utah in Garfield, Sanpete, Emery, Wasatch and Uintah? counties; western Colorado

Management Responsibility: Dixie, Manti-LaSal, and Uinta NF's and BLM-Vernal District

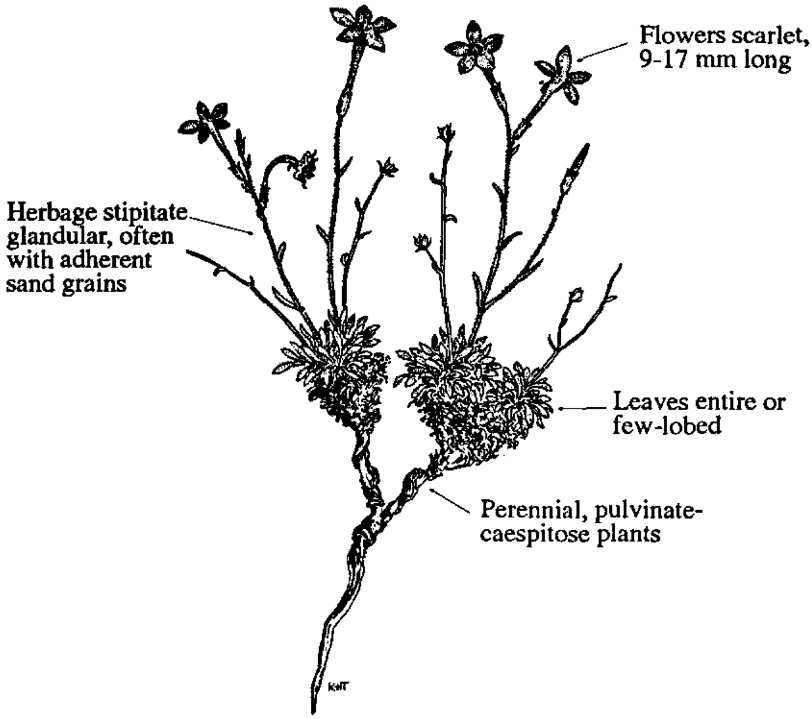
Habitat: Open slopes and ridges in sagebrush, mountain brush, and juniper communities on the Green River Shale Formation and limestone gravels between 6,990 to 10,000 feet elevation, June-August.

Look-alikes: A distinct species with the spikelets 1 or 2 (3)-flowered, the panicles ultimately open, the branches widley spreading to reflexed and distinctly pubescent under 10x magnification. Similar in general appearance to Indian Rice grass.

Closeup of Festuca dasyclada by B. Franklin

Habitat of Festuca dasyclada by B. Franklin

Species
Distribution


Flowers scarlet, 9-17 mm long
Herbage stipitate glandular, often with adherent sand grains
Leaves entire or few-lobed
Perennial, pulvinate-caespitose plants

GILIA CAESPITOSA

Scientific Name: *Gilia caespitosa* Gray

Common Name: Rabbit Valley gilia

Family (Common Name): Polemoniaceae (Phlox Family)

Synonyms: None

Global Distribution: Endemic to Utah in Wayne County

Management Responsibility: Dixie NF?, Capitol Reef NP, BLM-Richfield District, and private

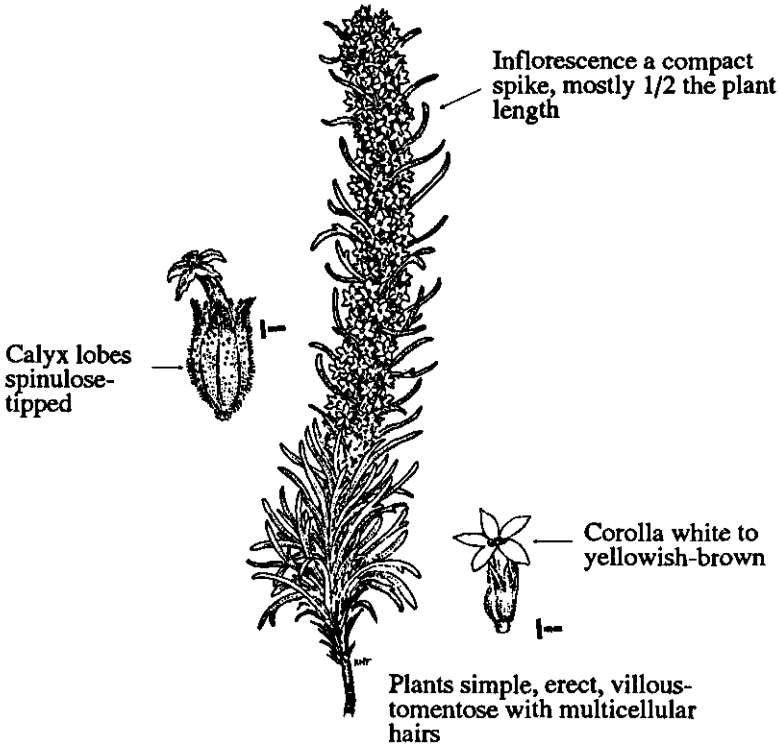
Habitat: Pinyon-juniper community on the Carmel and Navajo formations between 5,200 to 8,515 feet elevation, June-July.

Look-alikes: A distinct species separated by the caespitose mat-forming habit, glandular pubescence throughout, reduced cauline leaves, few flowered inflorescence, and red flowers.

Closeup of Gilia caespitosa by D. Atwood

Habitat of Gilia caespitosa by D. Atwood

Species
Distribution


Inflorescence a compact spike, mostly 1/2 the plant length
Calyx lobes spinulose-tipped
Corolla white to yellowish-brown
Plants simple, erect, villous-tomentose with multicellular hairs

GILIA SPICATA

Scientific Name: *Gilia spicata* Nutt. var. *spicata*

Common Name: Spike gilia

Family (Common Name): Polemoniaceae (Phlox Family)

Synonyms: *Ipomopsis spicata* (Nutt.) V. Grant

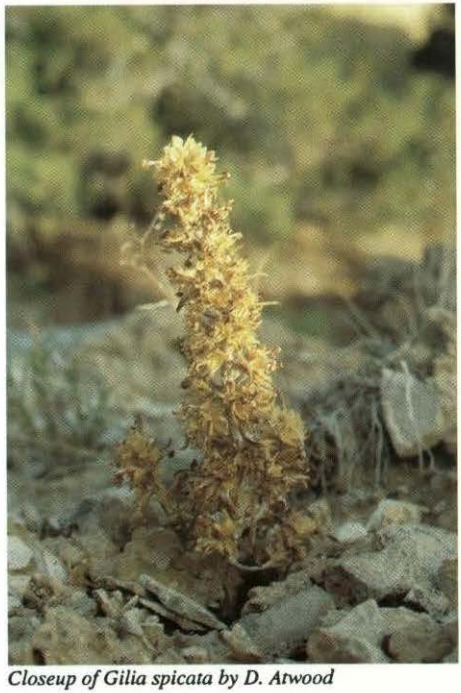
Global Distribution: Daggett County, Utah; Idaho and Montana, south to New Mexico

Management Responsibility: Ashley NF

Habitat: Juniper and sagebrush communities, often on barrens between 5,740 to 6,200 feet elevation, May-June.

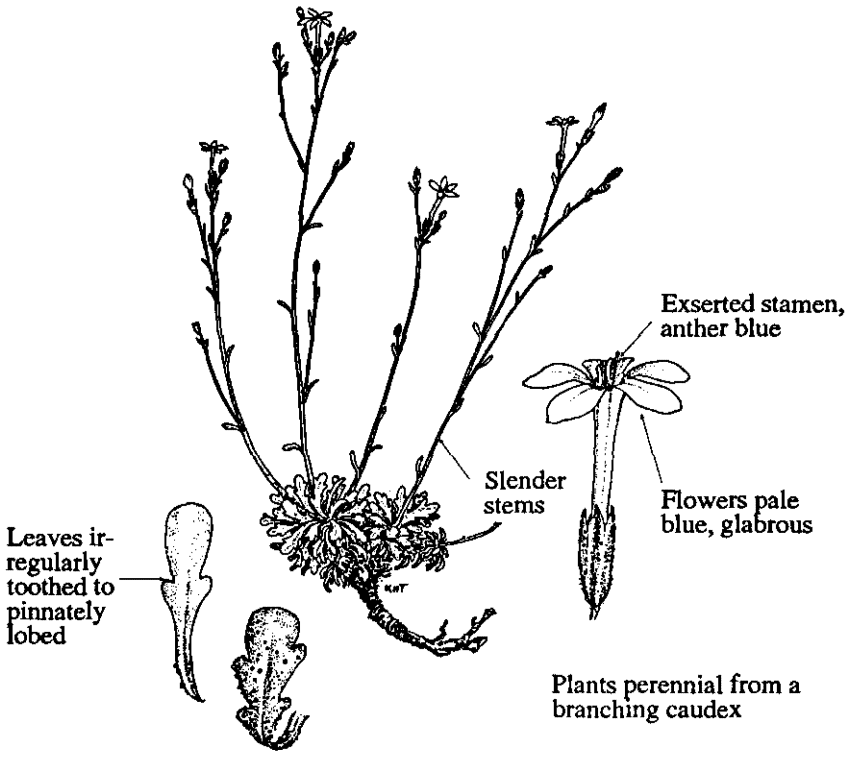
Look-alikes: A distinct species separated by the elongate spicate inflorescence, entirely herbaceous habit, and narrow (1-2 mm wide), linear, and entire or pinnatilobate leaves.

Habitat of Gilia spicata by D. Atwood



Closeup of Gilia spicata by D. Atwood

Species
Distribution


Exserted stamen, anther blue
Slender stems
Flowers pale blue, glabrous
Leaves irregularly toothed to pinnately lobed
Plants perennial from a branching caudex

GILIA TENUIS

Scientific Name: *Gilia tenuis* Smith & Neese

Common Name: Mussentuchit Gilia

Family (Common Name): Polemoniaceae (Phlox Family)

Synonyms: None

Global Distribution: Endemic to south central Utah in Sevier and Emery counties

Management Responsibility: BLM-Moab and Richfield Districts and Capital Reef NP?

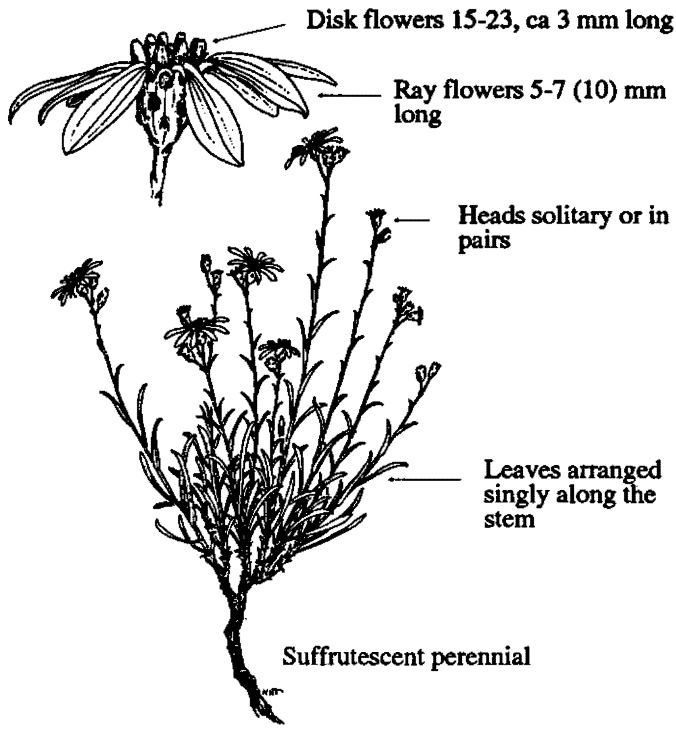
Habitat: Open habitat of pinyon-juniper woodland, growing on sparsely vegetated, fine-textured, pale, poorly cemented limestone, May-June.

Look-alikes: *G. tenuis* is closely related to *G. subnuda* and *G. caespitosa,* but differs in its blue flowers, slender stems, exserted stamens and less densely glandular corollas.

Closeup of Gilia tenuis by D. Atwood

Habitat of Gilia tenuis by D. Atwood

Species Distribution


Disk flowers 15-23, ca 3 mm long
Ray flowers 5-7 (10) mm long
Heads solitary or in pairs
Leaves arranged singly along the stem
Suffrutescent perennial

GUTIERREZIA PETRADORIA

Scientific Name: *Gutierrezia petradoria* (Welsh & Goodrich) Welsh

Common Name: Goldenrod snakeweed

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

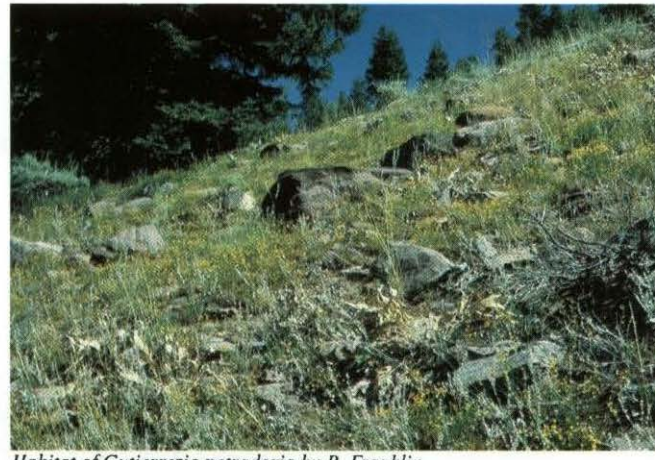
Synonyms: *Xanthocephalum petradoria* Welsh & Goodrich

Global Distribution: Endemic to the Canyon and Pavant ranges in eastern Millard and Juab counties, Utah

Management Responsibility: Fishlake NF

Habitat: Sagebrush, oakbrush, pinyon-juniper, mountain mahogany and white fir community at 6,300 to 8,500 feet elevation, August-September.

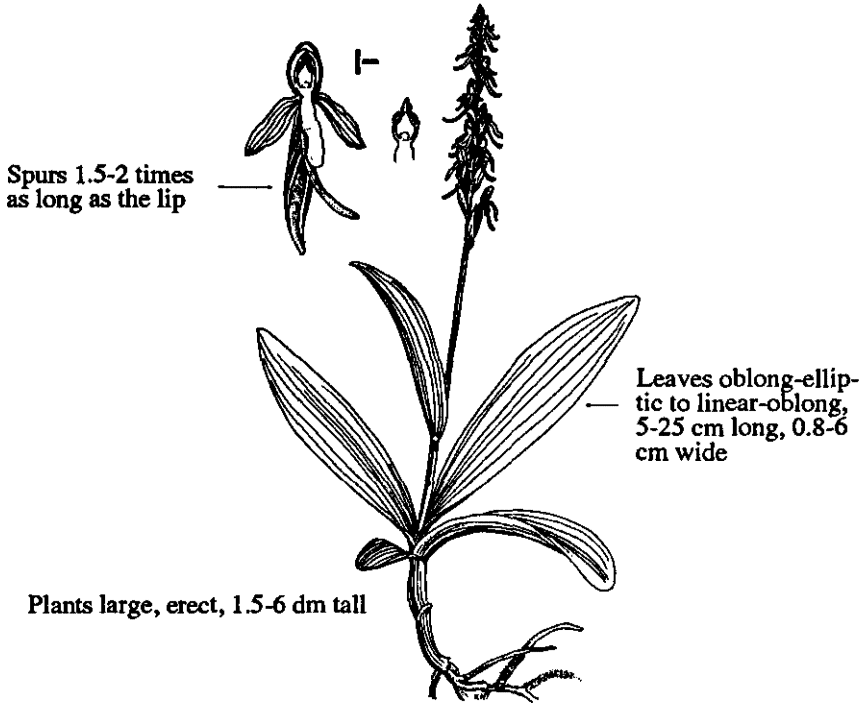
Look-alikes: Very distinct, but may be confused with *Petradoria pumila.* The golden snakeweed is recognized by its leaves arranged singly along the stem, heads solitary or in pairs, disk flowers 15-23 and ray flowers 5-7 mm long.



Habitat of Gutierrezia petradoria by B. Franklin

Closeup of Gutierrezia petradoria by D. Atwood

Species
Distribution


Spurs 1.5-2 times as long as the lip
Leaves oblong-elliptic to linear-oblong, 5-25 cm long, 0.8-6 cm wide
Plants large, erect, 1.5-6 dm tall

HABENARIA ZOTHECINA

Scientific Name: *Habenaria zothecina* Higgins and Welsh

Common Name: Alcove bog-orchid

Family (Common Name): Orchidaceae (Orchid Family)

Synonyms: None

Global Distribution: Endemic to Emery, Garfield, San Juan, Grand and Uintah counties, Utah, and Moffat County, Colorado.

Management Responsibility: BLM-Moab and Cedar City Districts, Dinosaur NM, Glen Canyon NRA and Canyonlands NP?

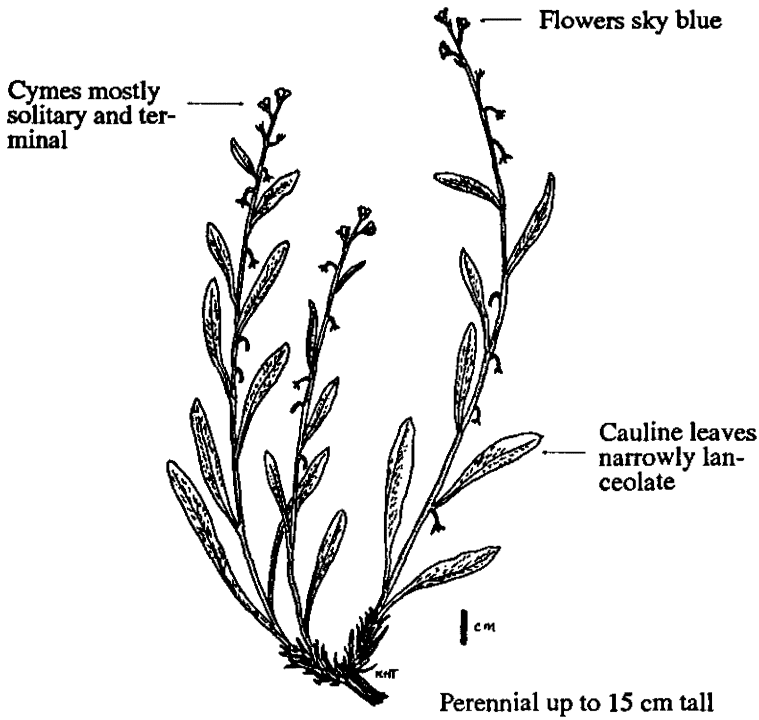
Habitat: Seeps, hanging gardens, and moist stream areas between 4,360 to 8,690 feet elevation from the desert shrub to the oak brush communities, late July-August.

Look-alikes: Distinct from other species by the spur length which is 1.5-2 times as long as the lip.

Closeup of Habenaria zothecina by W. Jennings

Habitat of Habenaria zothecina by D. Trotter

Species
Distribution



HACKELIA IBAPENSIS

Scientific Name: *Hackelia ibapensis* L. Shultz & J. Shultz

Common Name: Deep Creek Stickseed

Family (Common Name): Boraginaceae (Borage Family)

Synonyms: None

Global Distribution: Endemic to the Deep Creek Mountains, Juab County,

Management Responsibility: BLM-Salt Lake and Richfield District and Goshute TL?

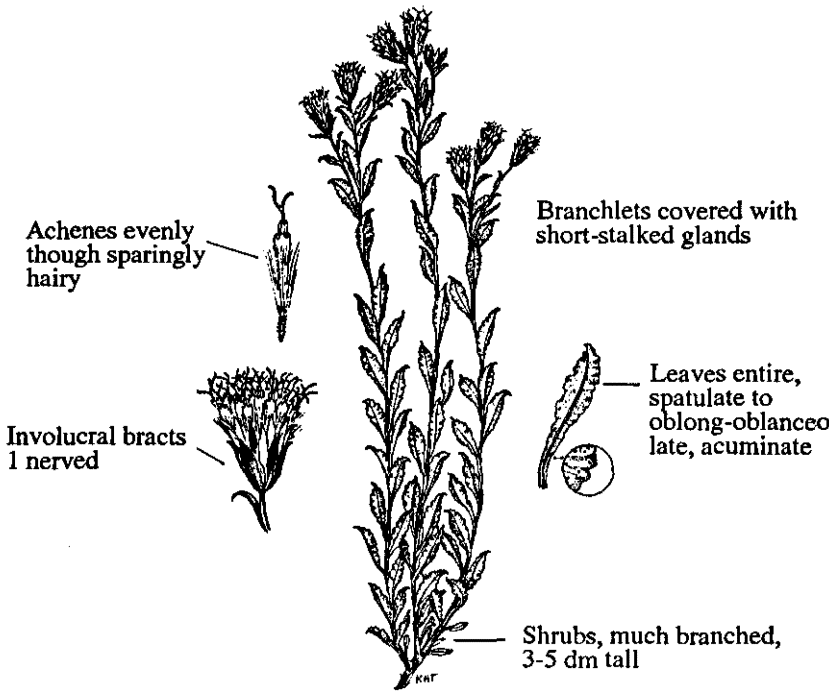
Habitat: Exposed granite outcrops in Douglas fir and mountain brush communities at 8,200 feet elevation, June.

Look-alikes: Similar to *H. sharsmithii*, but with sky-blue flowers, smaller stature (to 15 cm high), cymes mostly solitary and terminal, and narrowly lanceolate cauline leaves.

Closeup of Hackelia ibapensis by L. Shultz

Habitat of Hackelia ibapensis by L. Shultz

Species Distribution


Achenes evenly though sparingly hairy
Involucral bracts 1 nerved
Branchlets covered with short-stalked glands
Leaves entire, spatulate to oblong-oblanceolate, acuminate
Shrubs, much branched, 3-5 dm tall

HAPLOPAPPUS CRISPUS

Scientific Name: *Haplopappus crispus* L. C. Anderson

Common Name: Pine Valley goldenbush

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

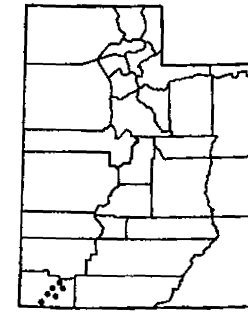
Global Distribution: Endemic in Washington and Millard? counties, Utah

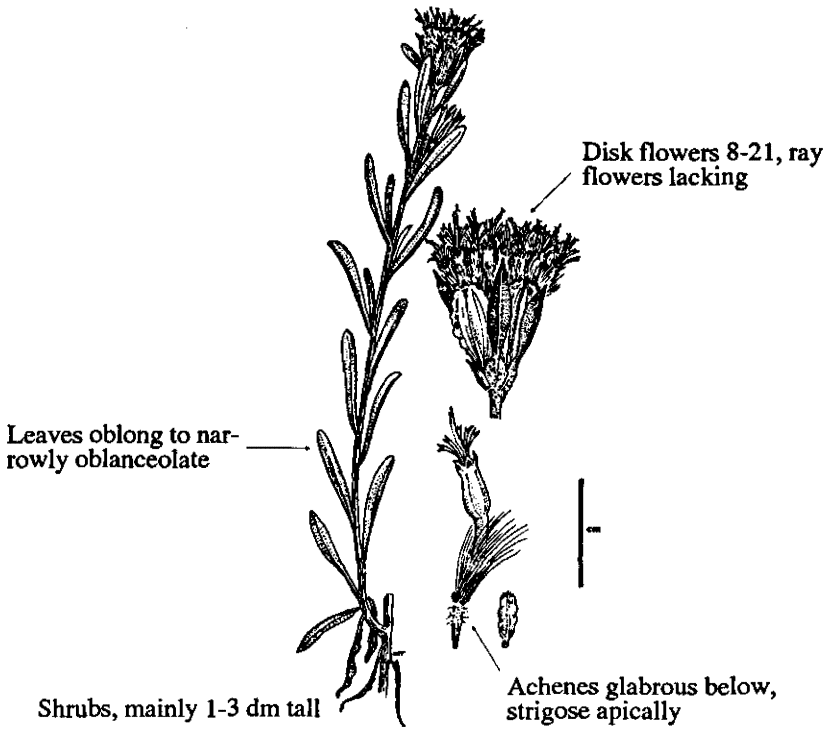
Management Responsibility: Dixie NF, BLM-Cedar City and Richfield Districts?

Habitat: Ponderosa pine, fir, manzanita, and aspen communities between 5,970 to 9,200 feet elevation, August-October.

Look-alikes: Separated from other shrubby species by the 1-nerved involucral bracts and evenly though sparingly hairy achenes.

Species
Distribution




Disk flowers 8-21, ray flowers lacking
Leaves oblong to narrowly oblanceolate
Shrubs, mainly 1-3 dm tall
Achenes glabrous below, strigose apically

HAPLOPAPPUS ZIONIS

Scientific Name: *Haplopappus zionis* L.C. Anderson

Common Name: Cedar Breaks goldenbush

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

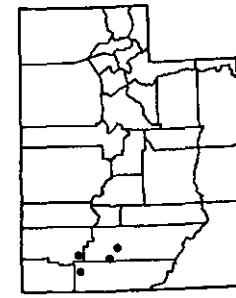
Global Distribution: Endemic to Garfield, Iron, and Kane counties, Utah

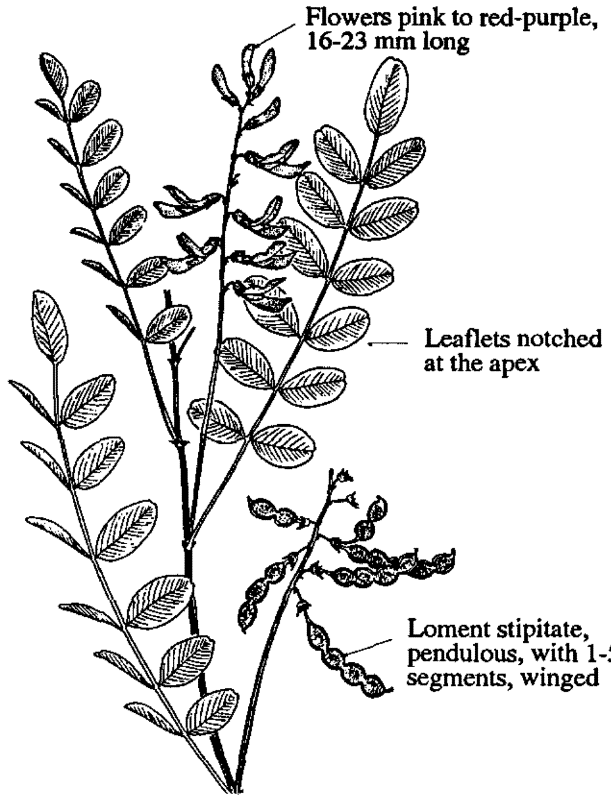
Management Responsibility: Zion and Bryce Canyon NP's and Dixie and Manti-LaSal NF's

Habitat: Spruce-fir and ponderosa pine communities mostly on the Cedar Breaks (Wasatch) Limestone Formation between 8,000 to 10,000 feet elevation, mid July-August.

Look-alikes: Distinct from other shrubby species by the 3-nerved involucral bracts, and glabrous achenes (except for a few apical hairs).

Species
Distribution




Flowers pink to red-purple, 16-23 mm long
Leaflets notched at the apex
Loment stipitate, pendulous, with 1-5 segments, winged

HEDYSARUM OCCIDENTALE VAR. *CANONE*

Scientific Name: *Hedysarum occidentale* Greene var. *canone* Welsh

Common Name: Canyon sweetvetch or Coal sweetvetch

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

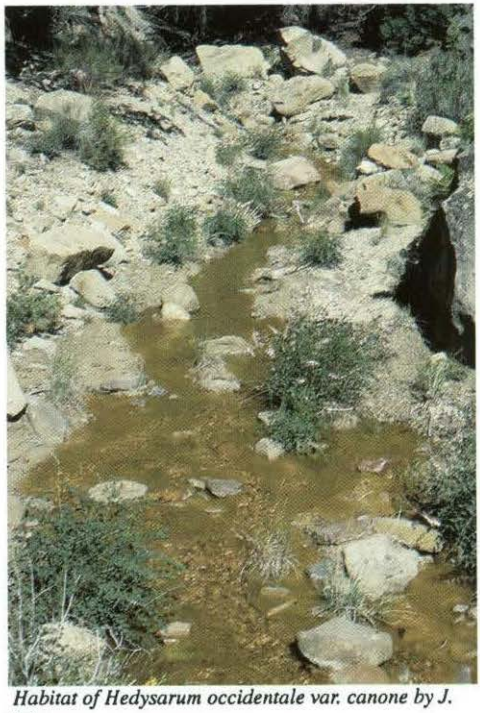
Global Distribution: Endemic in Duchesne, Carbon, and Emery counties, Utah

Management Responsibility: Manti-LaSal NF, BLM-Moab District and private

Habitat: Pinyon-juniper, sagebrush, and wash communities between 5,000 and 8,000 feet elevation, late June-mid-August.

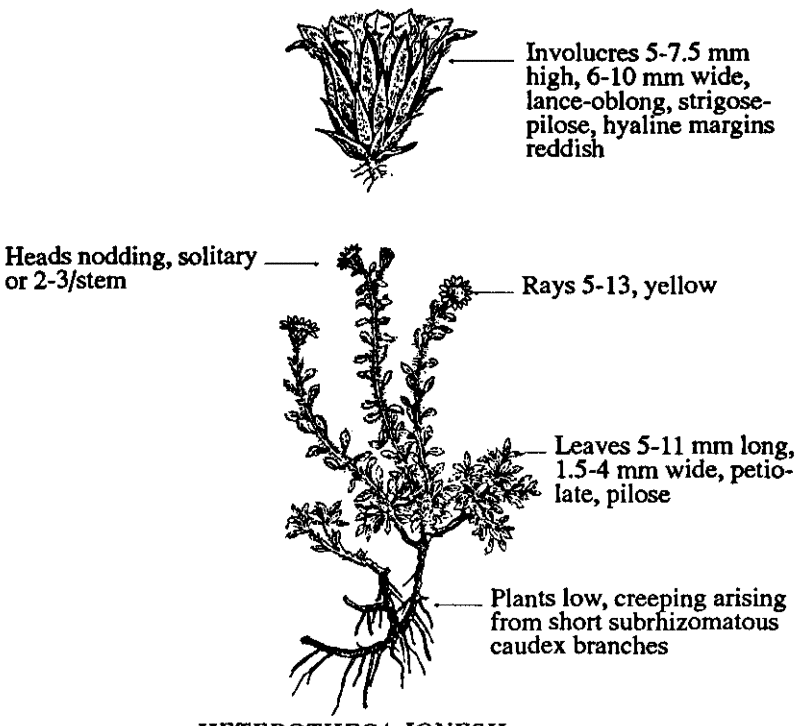
Look-alikes: Differing from var. *occidentale* in the more robust habit, leaflets broader, obtuse and notched, open racemes and calyx-teeth 2 mm or less long.

Closeup of Hedysarum occidentale var. canone by J. Tuhy



Habitat of Hedysarum occidentale var. canone by J. Tuhy

Species Distribution


Involucres 5-7.5 mm high, 6-10 mm wide, lance-oblong, strigose-pilose, hyaline margins reddish
Heads nodding, solitary or 2-3/stem
Rays 5-13, yellow
Leaves 5-11 mm long, 1.5-4 mm wide, petiolate, pilose
Plants low, creeping arising from short subrhizomatous caudex branches

HETEROTHECA JONESII

Scientific Name: *Heterotheca jonesii* (Blake) Welsh & Atwood

Common Name: Jones goldenaster

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Chrysopsis caespitosa* Jones not Nutt., *Chrysopsis jonesii* Blake

Global Distribution: Garfield, Kane, and Washington counties, Utah

Management Responsibility: Dixie NF, Zion and Bryce Canyon NP's, Cedar Breaks NM and BLM-Cedar City District

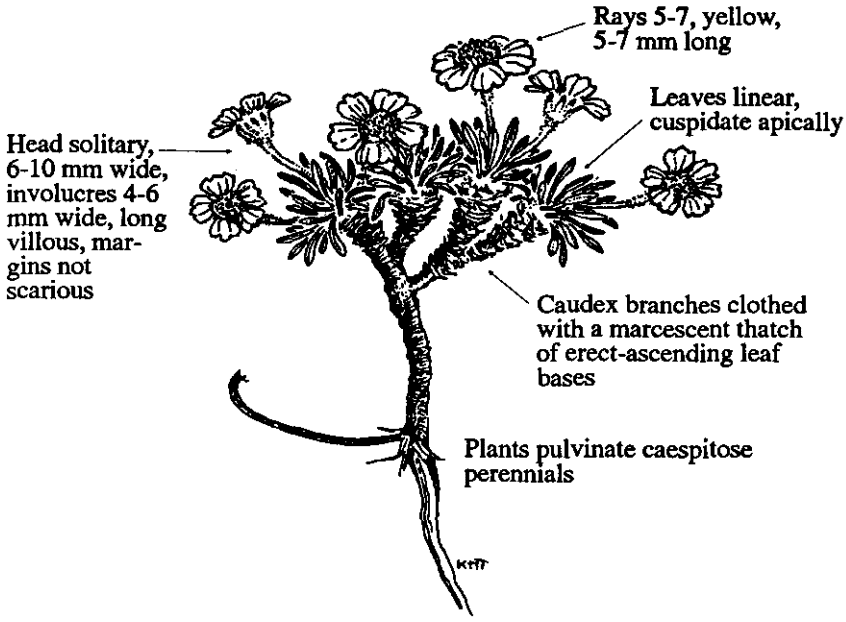
Habitat: Ponderosa pine, manzanita, pinyon-pine, and Douglas fir communities on sandstone or in sand between 4,000 to 9,450 feet elevation, May-September.

Look-alikes: Easily recognized from other species by the low, creeping, mat-forming habit, subrhizomatous caudex branches, and nodding flowering heads. The entire plant less than 8 cm high, but ca 2 feet across.

Closeup of Heterotheca jonesii by L. Shultz

Habitat of Heterotheca jonesii by K. Snyder

Species
Distribution


Rays 5-7, yellow, 5-7 mm long
Leaves linear, cuspidate apically
Head solitary, 6-10 mm wide, involucres 4-6 mm wide, long villous, margins not scarious
Caudex branches clothed with a marcescent thatch of erect-ascending leaf bases
Plants pulvinate caespitose perennials

HYMENOXYS DEPRESSA

Scientific Name: *Hymenoxys depressa* (T. & G.) Welsh & Reveal

Common Name: Low hymenoxys or Depressed bitterweed

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Actinella depressa* Gray

Global Distribution: Endemic to Utah in Duchesne, Emery, Wayne, Garfield and Sevier counties

Management Responsibility: Manti-LaSal, Dixie, Fishlake and Ashley NF's, BLM-Cedar City, Richfield, Moab and Vernal Districts, Bryce Canyon and Capitol Reef NP's and State Trust Lands

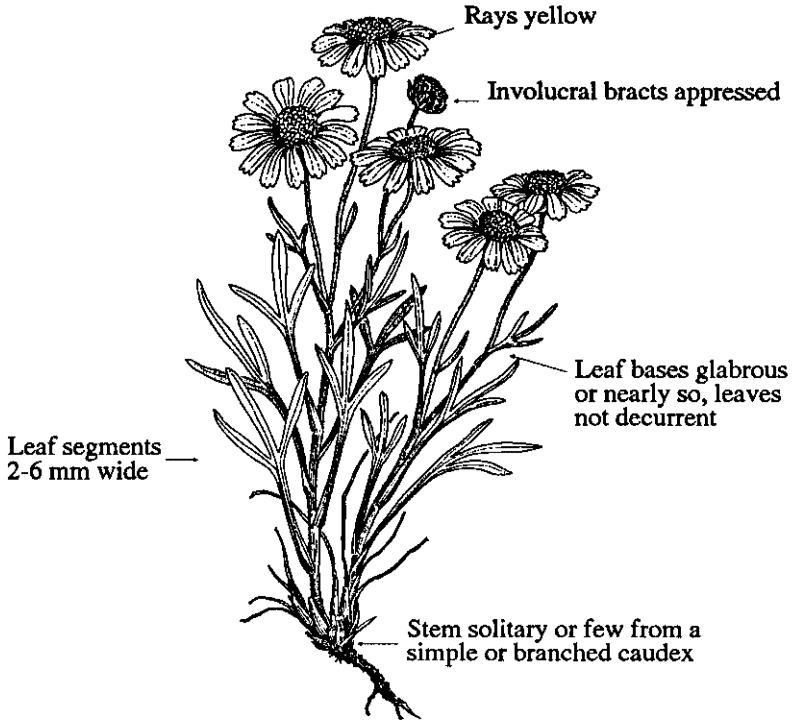
Habitat: Ephedra, sagebrush, shadscale and pinyon-juniper communities on fine silty clay to clay loam soils between 4,400 to 7,120 feet elevation, late May-June.

Look-alikes: Close to *H. acaulis* var. *caespitosa* which is distinctive in being more hairy, usually has broader leaves, and lacks glandular punctate.

Closeup of Hymenoxys depressa by B. Thompson

Habitat of Hymenoxys depressa by B. Thompson

Species
Distribution


Rays yellow
Involucral bracts appressed
Leaf bases glabrous or nearly so, leaves not decurrent
Leaf segments 2-6 mm wide
Stem solitary or few from a simple or branched caudex

HYMENOXYS HELENIOIDES

Scientific Name: *Hymenoxys helenioides* (Rydb.) Cockerell

Common Name: Helenium hymenoxys or Intermountain bitterweed

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Picradenia helenioides* Rydb.

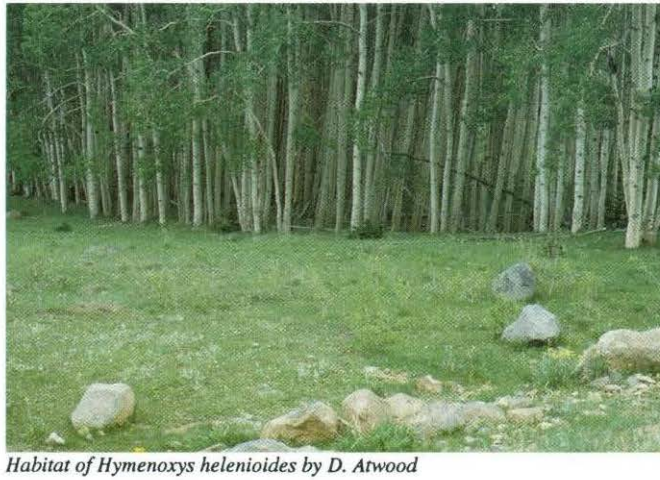
Global Distribution: Emery, Garfield, Sanpete, Carbon, and Sevier counties, Utah; Colorado, Arizona, and New Mexico (Navajo Nation)

Management Responsibility: Manti-LaSal, Fishlake, and Dixie NF's

Habitat: Mountain brush, sagebrush, aspen, and meadow communities on clay loam soils between 8,800 to 10,700 feet elevation, June-late August.

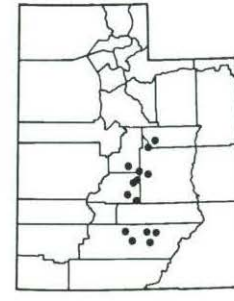
Look-alikes: Closely resembling *Helenium hoopesii*, but distinct in having yellow rays vs yellow orange, smaller heads (disks 10-21 mm broad vs 2-3.5 cm broad), leaves narrow and mostly 2-5-lobed vs broader and entire in *H. hoopesii.*

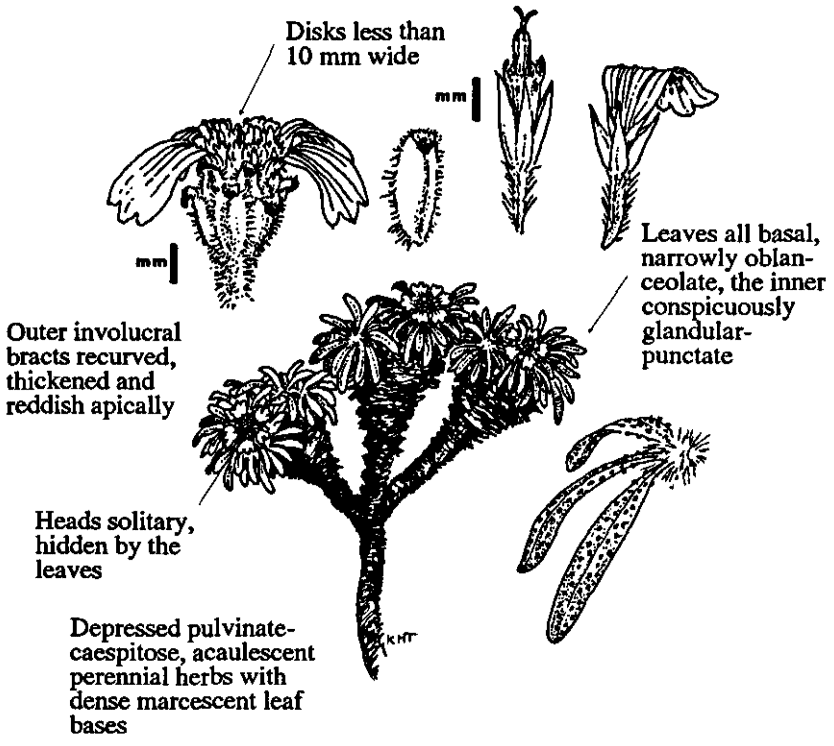
Closeup of Hymenoxys helenioides by J. Anderson



Habitat of Hymenoxys helenioides by D. Atwood

Species
Distribution




Disks less than 10 mm wide
mm
mm
Leaves all basal, narrowly oblanceolate, the inner conspicuously glandular-punctate
Outer involucral bracts recurved, thickened and reddish apically
Heads solitary, hidden by the leaves
Depressed pulvinate-caespitose, acaulescent perennial herbs with dense marcescent leaf bases

HYMENOXYS LAPIDICOLA

Scientific Name: *Hymenoxys lapidicola* Welsh and Neese

Common Name: Rock hymenoxys

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

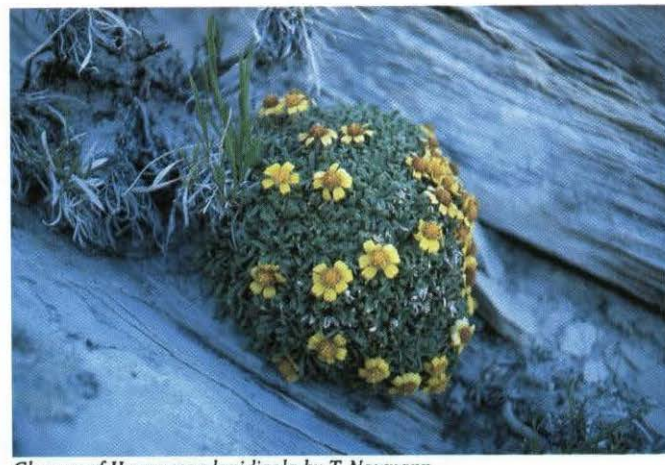
Synonyms: None

Global Distribution: Endemic to Uintah County in northeastern Utah

Management Responsibility: BLM-Vernal District and Dinosaur NM

Habitat: Ponderosa Pine/Manzanita and pinyon-juniper communities usually in rock crevices between 6,000 to 8,110 feet elevation, June.

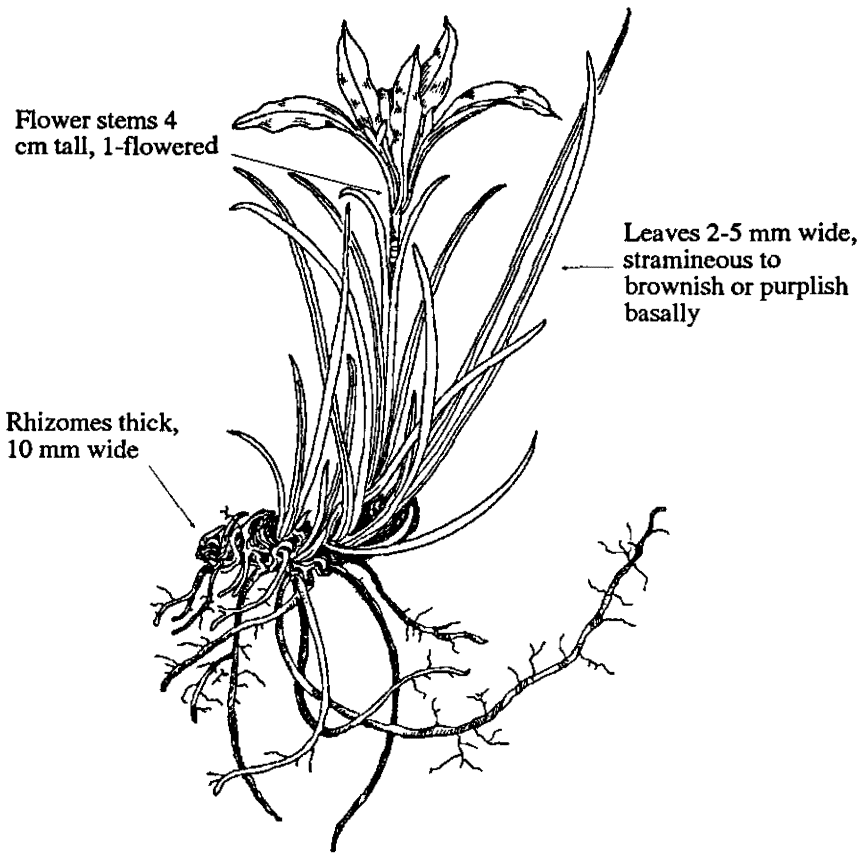
Look-alikes: Similar to *H. torreyana* and *H. depressa,* but recognized by the depressed pulvinate-caespitose, acaulescent habit, thickened reddish recurved involucral bracts, and disks less than 10 mm wide.



Closeup of Hymenoxys lapidicola by T. Naumann

Habitat of Hymenoxys lapidicola by T. Naumann

Species Distribution


Flower stems 4 cm tall, 1-flowered
Leaves 2-5 mm wide, stramineous to brownish or purplish basally
Rhizomes thick, 10 mm wide

IRIS PARIENSIS

Scientific Name: *Iris pariensis* Welsh

Common Name: Paria iris

Family (Common Name): Iridaceae (Iris Family)

Synonyms: None

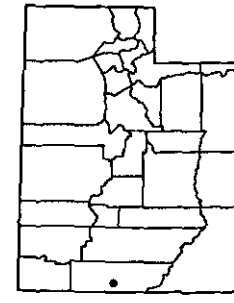
Global Distribution: Kane County, Utah; a Colorado endemic

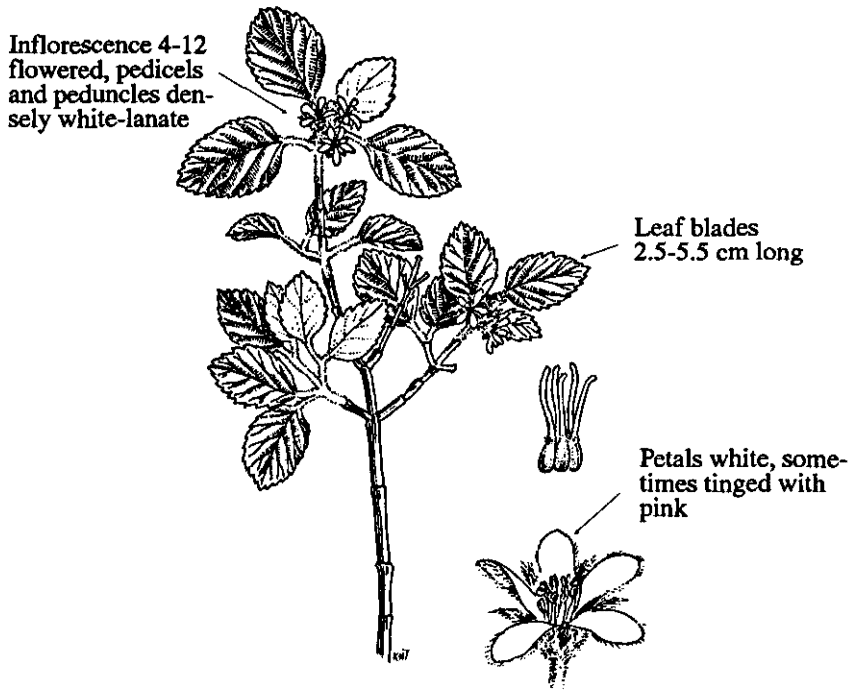
Management Responsibility: BLM-Cedar City District?, Glen Canyon NRA?, State?

Habitat: Grass-shrub community, at 4,600-5,000 feet elevation, May.

Look-alikes: None

Species
Distribution




Inflorescence 4-12 flowered, pedicels and peduncles densely white-lanate
Leaf blades 2.5-5.5 cm long
Petals white, sometimes tinged with pink

JAMESIA AMERICANA VAR. *ZIONIS*

Scientific Name: *Jamesia americana* Torr. & Gray var. *zionis* N. Holmg.

Common Name: Cliff jamesia

Family (Common Name): Saxifragaceae (Saxifrage Family)

Synonyms: None

Global Distribution: Endemic to Utah in Zion Canyon and adjacent area near Kanab in Washington, Iron and Kane counties

Management Responsibility: Zion NP and BLM-Cedar City District

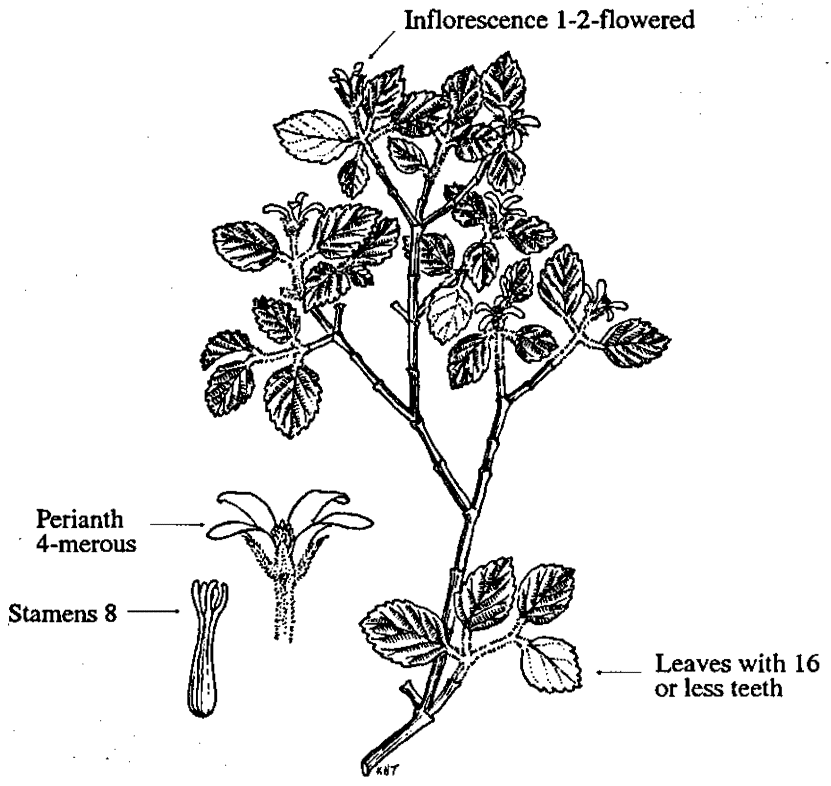
Habitat: Sandstone cliffs and slickrock slopes often where some moisture is perceptible as in hanging gardens at elevations between 3,900-6,560 feet elevation, June-early August.

Look-alikes: Closely related to var. *macrocalyx*, but differs in its longer and wider leaf blades. It also differs in its low elevation and preference for sandstone.

Closeup of Jamesia americana var. zionis by K. Snyder

Habitat of Jamesia americana var. zionis by K. Snyder

Species
Distribution



JAMESIA TETRAPETALA

Scientific Name: *Jamesia tetrapetala* N. & P. Holmgren

Common Name: Four-petal jamesia

Family (Common Name): Saxifragaceae (Saxifrage Family)

Synonyms: None

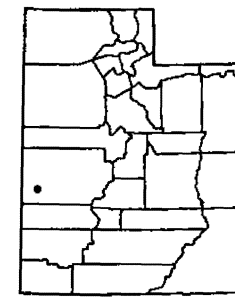
Global Distribution: Millard County, Utah; Nye, Lincoln, and White Pine counties, Nevada; a Great Basin endemic

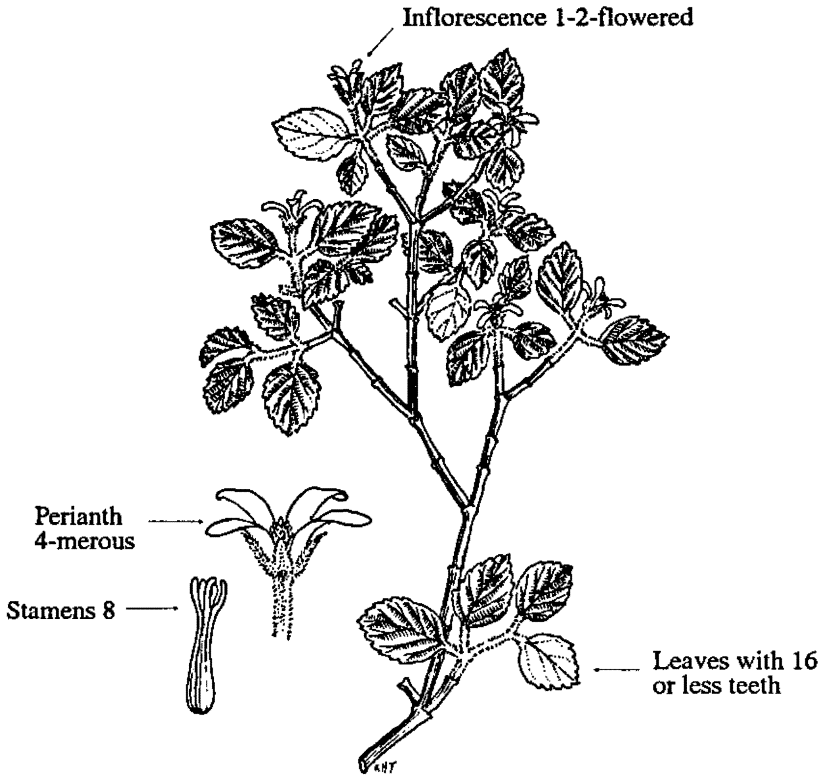
Management Responsibility: BLM-Richfield District

Habitat: Cracks and crevices in Paleozoic limestone outcrops and talus at cliff bases at 6,560 to 8,920 feet elevation, June.

Look-alikes: The four-petal Jamesia is distinguished from *Jamesia americana* by the number of sepal and petals (4 vs 5), stamen number (8 vs10), inflorescence of 1 or 2 flowers, and leaves with fewer than 16 teeth.

Species
Distribution





JAMESIA TETRAPETALA

Scientific Name: *Jamesia tetrapetala* N. & P. Holmgren

Common Name: Four-petal jamesia

Family (Common Name): Saxifragaceae (Saxifrage Family)

Synonyms: None

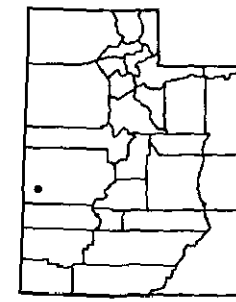
Global Distribution: Millard County, Utah; Nye, Lincoln, and White Pine counties, Nevada; a Great Basin endemic

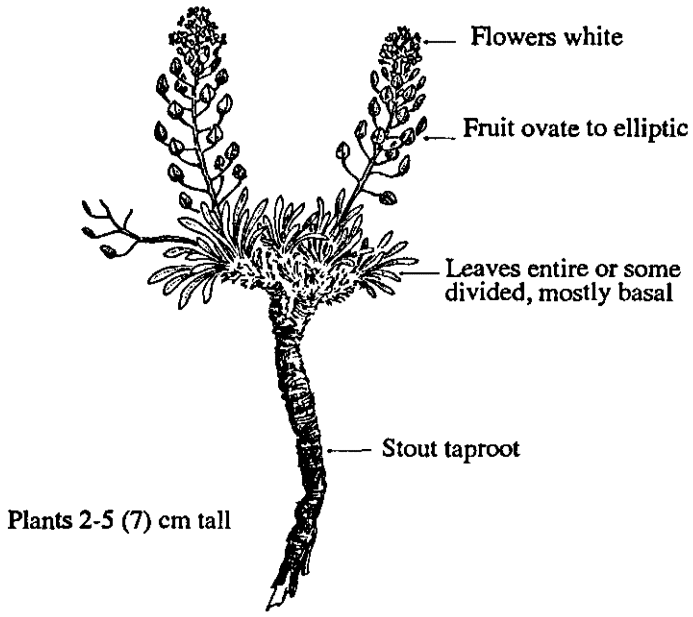
Management Responsibility: BLM-Richfield District

Habitat: Cracks and crevices in Paleozoic limestone outcrops and talus at cliff bases at 6,560 to 8,920 feet elevation, June.

Look-alikes: The four-petal Jamesia is distinguished from *Jamesia americana* by the number of sepal and petals (4 vs 5), stamen number (8 vs10), inflorescence of 1 or 2 flowers, and leaves with fewer than 16 teeth.

Species
Distribution





LEPIDIUM MONTANUM VAR. *NEESEAE*

Scientific Name: *Lepidium montanum* Nutt. var. *neeseae* Welsh & Reveal

Common Name: Neeses' peppergrass

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

Global Distribution: Endemic to south-central Utah in Garfield, County

Management Responsibility: Dixie NF and BLM-Cedar City District

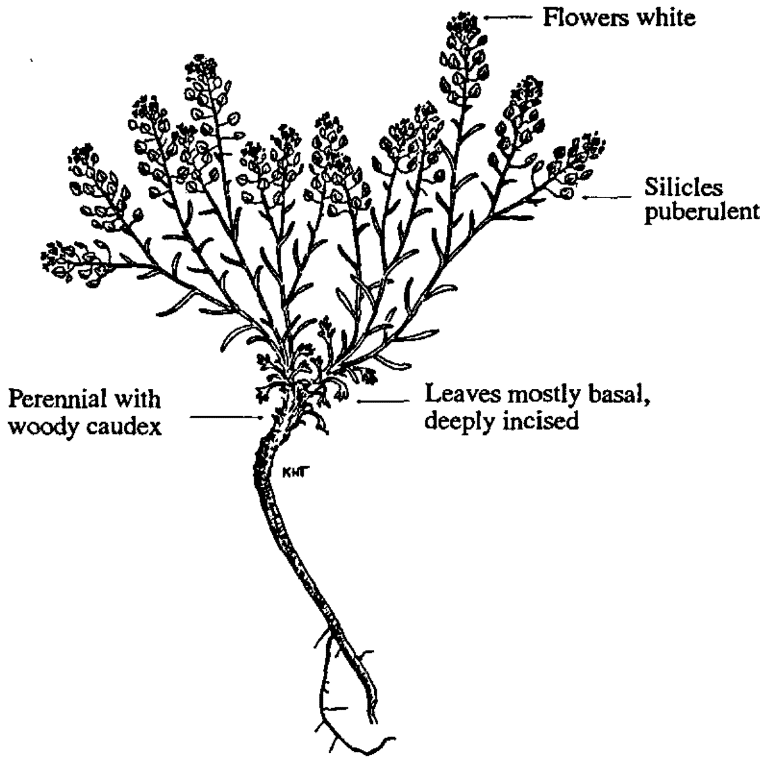
Habitat: Open areas in ponderosa pine and spruce-fir communities on the Navajo Sandstone Formation at 7,300-9,000 feet elevation, May-early June.

Look-alikes: Distinct from other varieties in the short stature (2-5 cm high) and the usually entire (sometimes divided) leaves.

Closeup of Lepidium montanum var. neeseae by D. Atwood

Habitat of Lepidium montanum var. neeseae by D. Atwood

Species Distribution



LEPIDIUM MONTANUM VAR. *STELLAE*

Scientific Name: *Lepidium montanum* Nutt. var. *stellae* Welsh & Reveal

Common Name: Stella pepperplant

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

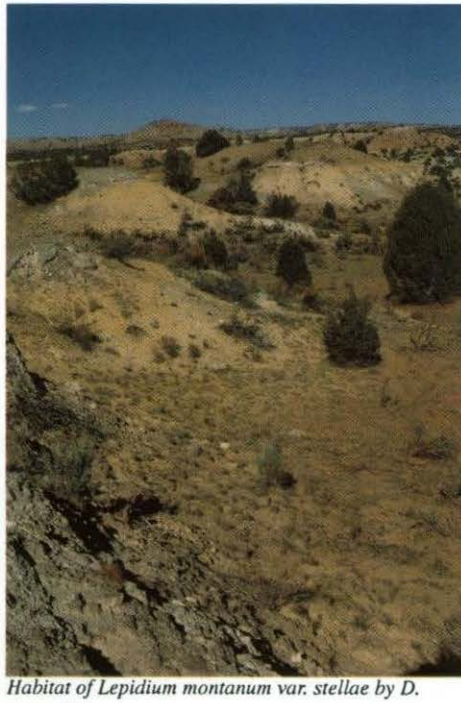
Global Distribution: Kane County, Utah; a Great Basin endemic

Management Responsibility: BLM-Richfield District

Habitat: White silty barrens of the Winsor Formation, with mound-forming plants, on a sagebrush-juniper community at about 5,570 feet elevation, May-early June.

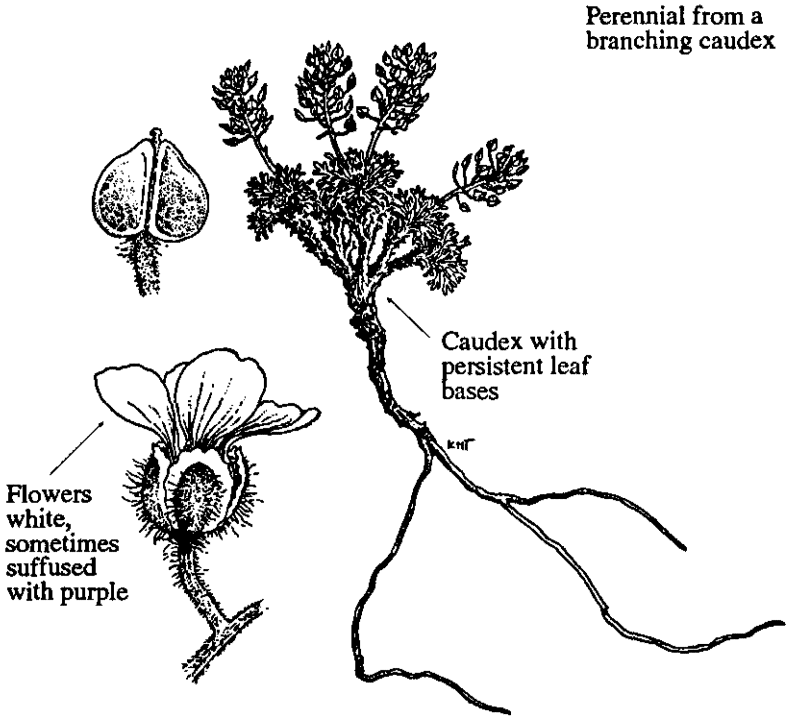
Look-alikes: This plant is closely allied to *L. montanum* var. *montanum*, but the plants are generally smaller and the silicles are puberulent.

Closeup of Lepidium montanum var. stellae by D. Atwood



Habitat of Lepidium montanum var. stellae by D. Atwood

Species Distribution



LEPIDIUM OSTLERI

Scientific Name: *Lepidium ostleri* Welsh & Goodrich

Common Name: Ostler pepperplant

Family (Common Name): Cruciferae (Mustard Family)

Synonyms: None

Global Distribution: San Francisco Mountains, Beaver County, Utah; a Great Basin endemic

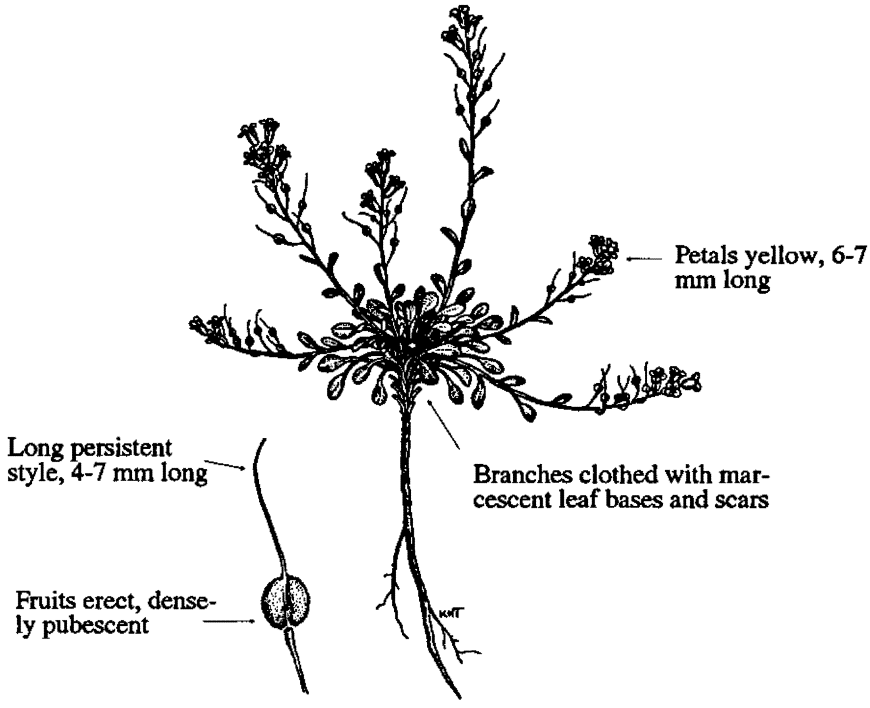
Management Responsibility: BLM-Cedar City District, private

Habitat: Limestone outcrops, typically in pinypn-juniper community at ca 5,790-6,800 feet elevation, June-early July.

Look-alikes: This compact dwarf perennial simulates some phases of *L. montanum*, but differs in the caudex branches being clothed with marcescent leaf bases. The leaves are typically only 3- to 5-lobed.

Closeup of Lepidum ostleri by S. Welsh

Species
Distribution


Petals yellow, 6-7 mm long
Long persistent style, 4-7 mm long
Branches clothed with marcescent leaf bases and scars
Fruits erect, densely pubescent

LESQUERELLA GARRETTII

Scientific Name: *Lesquerella garrettii* Payson

Common Name: Garrett bladderpod or Garrett twinpod

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: None

Global Distribution: Endemic to Utah in Davis, Salt Lake, Utah, and Wasatch counties

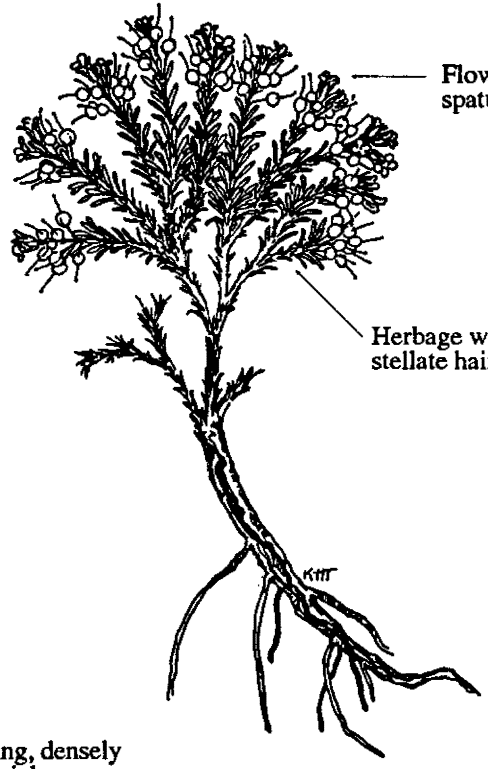
Management Responsibility: Uinta and Wasatch-Cache NF's, BLM-Salt Lake District?, Timp Cave NM? and private

Habitat: Alpine tundra, sub-alpine meadows, spruce-fir, and pine communities on limestone parent material, often in talus or on rock outcrops between 9,000 to 12,010 feet elevation, June-August.

Look-alikes: Distinct from other species in the straight or curved pedicels, silicles with densely pubescent erect hairs, and the caudex branches having conspicuous scars or persistent leaf bases.

Closeup of Lesquerella garretti by D. Atwood

Species
Distribution



LESQUERELLA TUMULOSA

Scientific Name: *Lesquerella tumulosa* (Barneby) Reveal

Common Name: Kodachrome bladderpod

Family (Common Name): Cruciferae (Mustard Family)

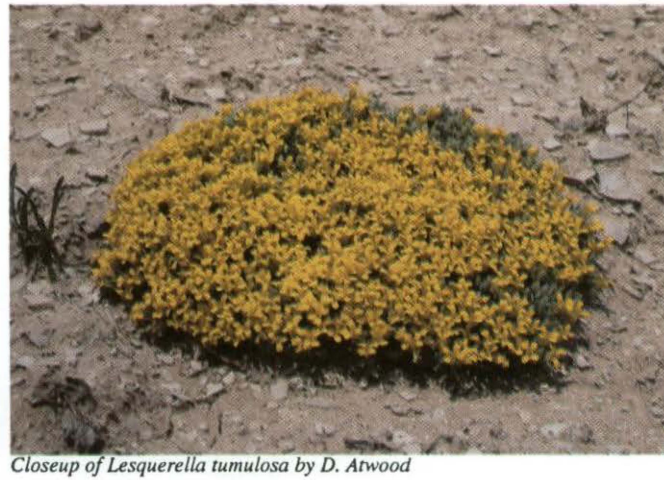
Synonyms: *L.hitchcockii* ssp. *tumulosa* Barneby

Global Distribution: Kane County, Utah; a Colorado Plateau endemic

Management Responsibility: BLM-Cedar City District, State of Utah

Habitat: White, bare shale knolls (Winnsor Member of the Carmel Formation) among scattered juniper in a Bouteloua grassland at 5,600-5880 feet elevation, May-mid-June.

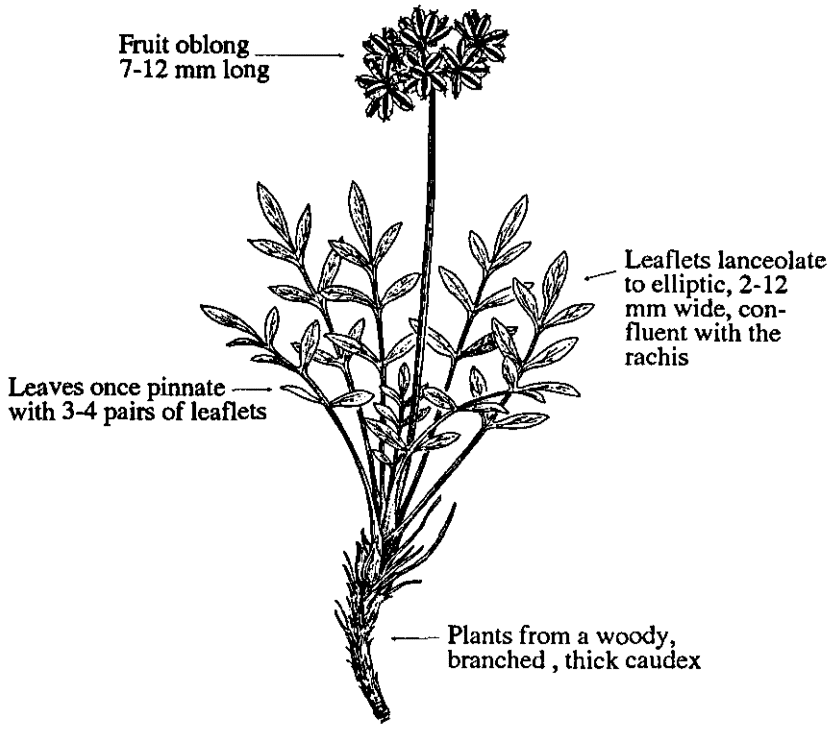
Look-alikes: This species is similar to *L. rubicundula,* but differs in being densely pulvinate-caespitose in cushion or moundlike clumps with numerous caudex branches and many flowers.



Closeup of Lesquerella tumulosa by D. Atwood

Habitat of Lesquerella tumulosa by D. Atwood

Species
Distribution


Fruit oblong
7-12 mm long
Leaflets lanceolate to elliptic, 2-12 mm wide, confluent with the rachis
Leaves once pinnate with 3-4 pairs of leaflets
Plants from a woody, branched , thick caudex

LOMATIUM LATILOBUM

Scientific Name: *Lomatium latilobum* (Rydb.) Mathias

Common Name: Canyonlands lomatium or Broad-leaved biscuitroot

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: *Cynomarathrum latilobum* Rydb.

Global Distribution: East-central and southeastern Utah in Grand and San Juan counties; Colorado

Management Responsibility: Manti-LaSal NF, BLM-Moab District, Arches, Natural Bridges and Canyonlands? NP's and private

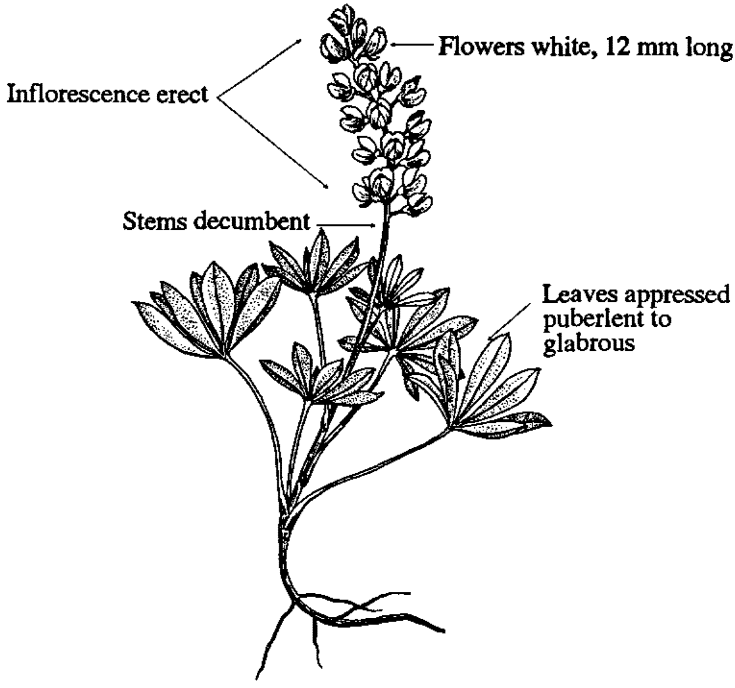
Habitat: Pinyon-juniper and deser shrub communities, mainly on the Entrada Sandstone Formation between 4,800 to 6,855 feet elevation, April-June.

Look-alikes: The only species in SE Utah with once-pinnate leaves and/or the ultimate segments over 15 mm long and fewer than 50/leaf, lanceolate to elliptic leaflets, and yellow petals when fresh.

Closeup of Lomatium latilobum by W. Jennings

Habitat of Lomatium latilobum by W. Jennings

Species
Distribution



LUPINUS CRASSUS

Scientific Name: *Lupinus crassus* Payson

Common Name: Thick-leaved lupine or Paradox lupine

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

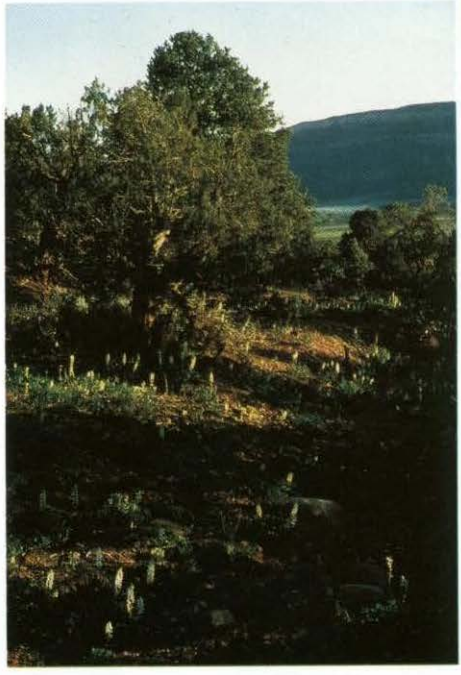
Global Distribution: Western Colorado in Montrose County

Management Responsibility: Manti-LaSal NF?, BLM-Montrose District and private

Habitat: Pinyon-juniper communities in draws and washes on quarternary alluvium derived from the Chinle Formation and on clayey soils derived from the Mancos Shale Formation between 5,000 to 5,800 feet elevation, May-June.

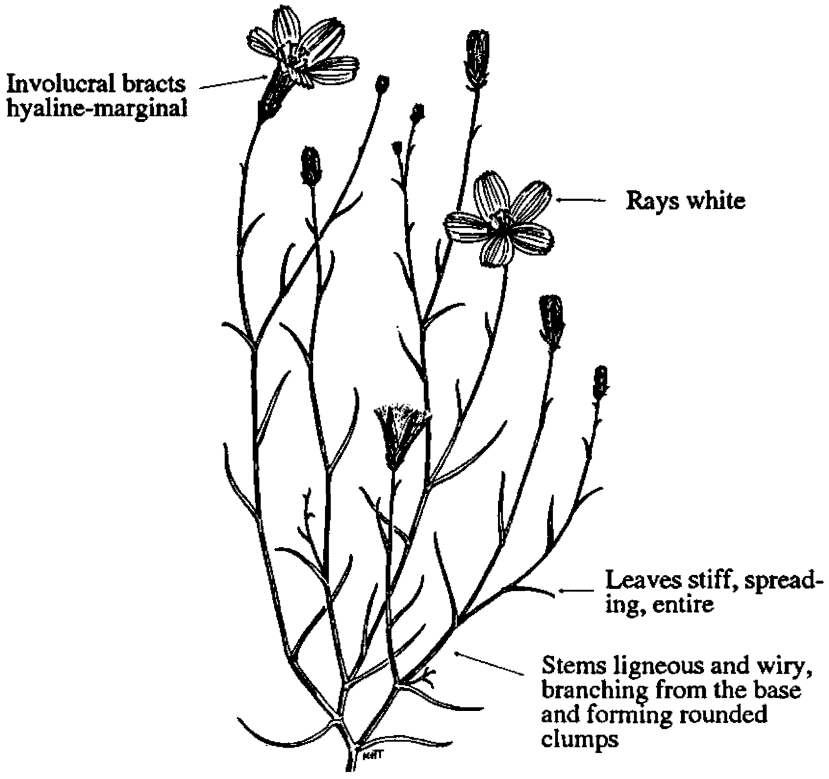
Look-alikes: Distinct from other species by the large, coarse, dense mat-forming habit, white flowers with purple-tipped keel (usually), and large thickish, somewhat folded, 5-10 leaflets.

Closeup of Lupinus crassus by J. Ratzloff



Habitat of Lupinus crassus by J. Ratzloff

Species
Distribution


Involucral bracts hyaline-marginal
Rays white
Leaves stiff, spreading, entire
Stems ligneous and wiry, branching from the base and forming rounded clumps

LYGODESMIA ENTRADA

Scientific Name: *Lygodesmia entrada* Welsh and Goodrich

Common Name: Entrada rushpink

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to Utah in Emery and Grand counties

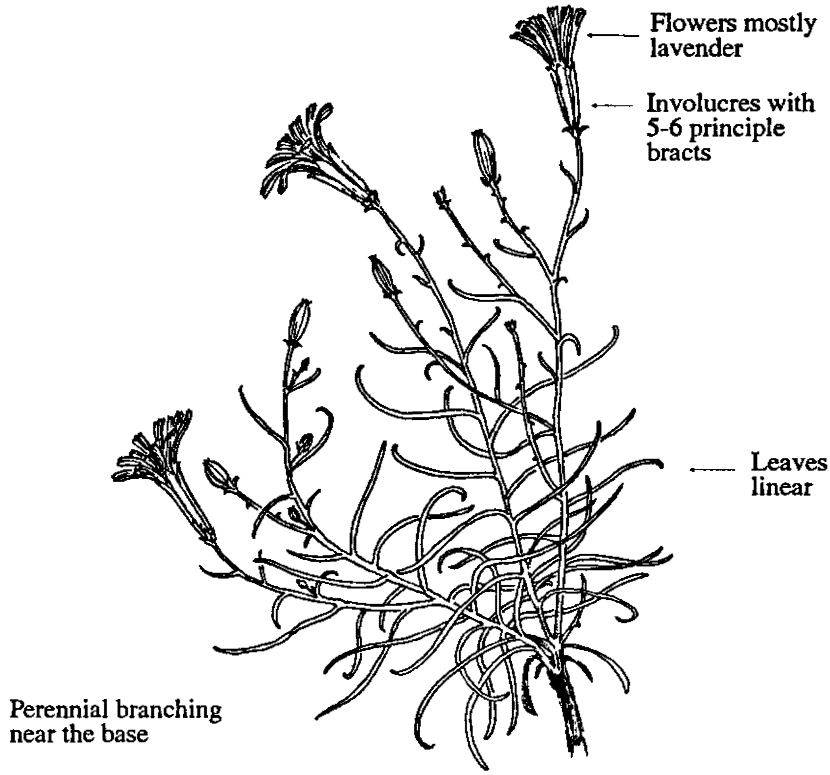
Management Responsibility: BLM-Moab, Richfield and Grand Districts, and Arches NP

Habitat: Mixed desert shrub and juniper communities between 4,400 to 4,800 feet elevation, June.

Look-alikes: Related to *L. grandiflora*, but having ligneous stems branching from the base and forming rounded clumps, and stiff spreading leaves.

Closeup of Lygodesmia entrada by S. Welsh

Species
Distribution



LYGODESMIA DOLORESENSIS

Scientific Name: *Lygodesmia doloresensis* Tomb

Common Name: Dolores rushpink

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Grand County, Utah (?); Mesa County, Colorado

Management Responsibility: BLM-Moab District

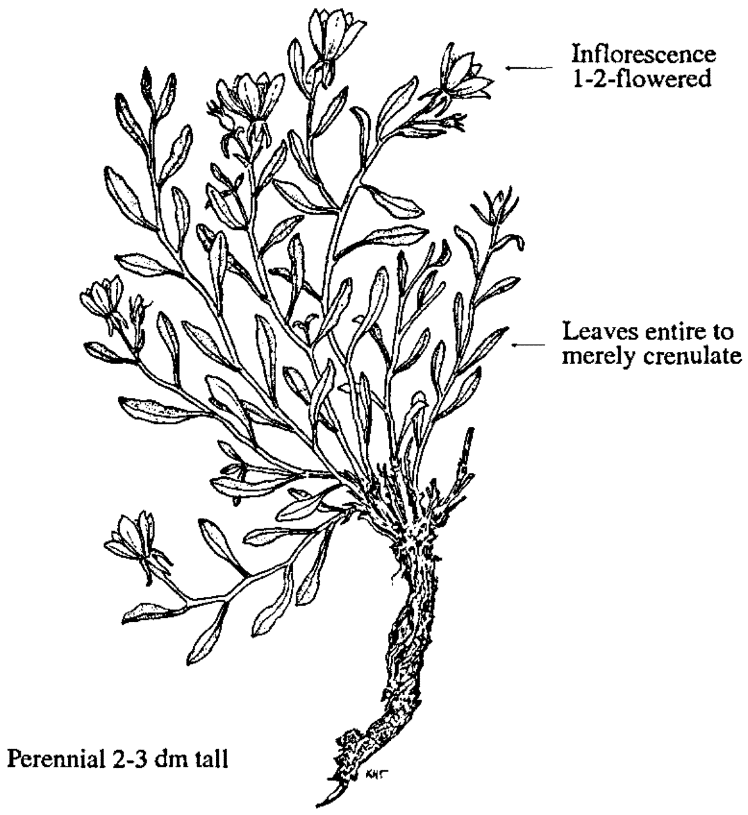
Habitat: Reddish alluvial soil, juniper-grassland, at 4,500 to 4,700 feet elevation, June.

Look-alikes: Similar to *L. grandiflora,* but differing in the involucres having 5 or 6 principal bracts (not 8 or 9) per head, and from other phases of that species by its very narrow leaves. The plant is considered by some to be synonymous with *L. grandiflora* var. *arizonica.*

Habitat of Lygodesmia doloresensis by J. Anderson

Closeup of Lygodesmia doloresensis by B. Neely

Species
Distribution



MENTZELIA ARGILLOSA

Scientific Name: *Mentzelia argillosa* Darlington

Common Name: Arapien stickleaf

Family (Common Name): Loasaceae (Stickleaf Family)

Synonyms: None

Global Distribution: Sanpete and Sevier (type from Vermillion) counties, Utah; Garfield County, Colorado

Management Responsibility: BLM-Richfield District, private

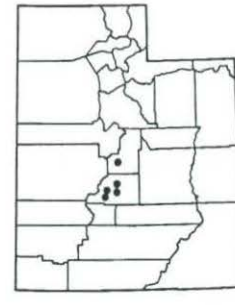
Habitat: Salt desert shrub and pinyobn-juniper communities on the Arapien Shale Formation at 5,000 to 6,200 feet elevation, June-July.

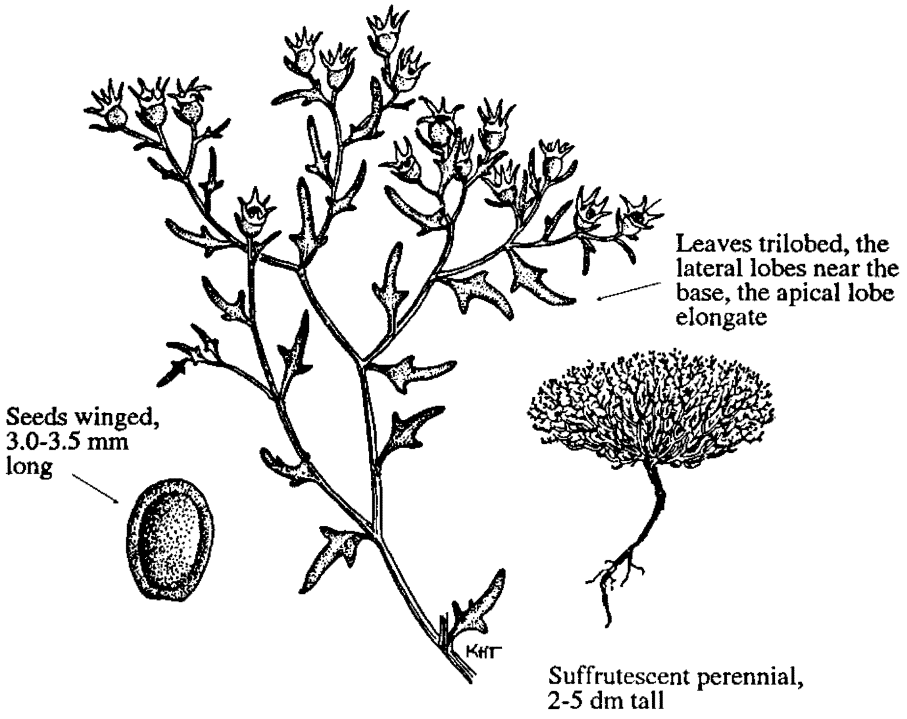
Look-alikes: The entire to merely crenulate leaves of this narrowly restricted plant are diagnostic.

Closeup of Mentzelia argillosa by C. Zupan

Habitat of Mentzelia argillosa by C. Zupan

Species
Distribution




Leaves trilobed, the lateral lobes near the base, the apical lobe elongate
Seeds winged, 3.0-3.5 mm long
KHT
Suffrutescent perennial, 2-5 dm tall

MENTZELIA MULTICAULIS VAR. *LIBRINA*

Scientific Name: *Mentzelia multicaulis* (Osterh.) Goodman var. *librina* Thorne & F.G. Sm.

Common Name: Book Cliffs blazing star

Family (Common Name): Loasaceae (Stickleaf Family)

Synonyms: None

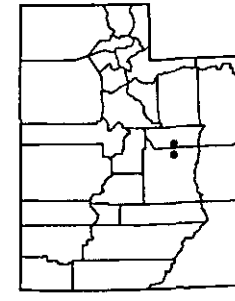
Global Distribution: Carbon and Emery counties, Utah; a Colorado Plateau endemic

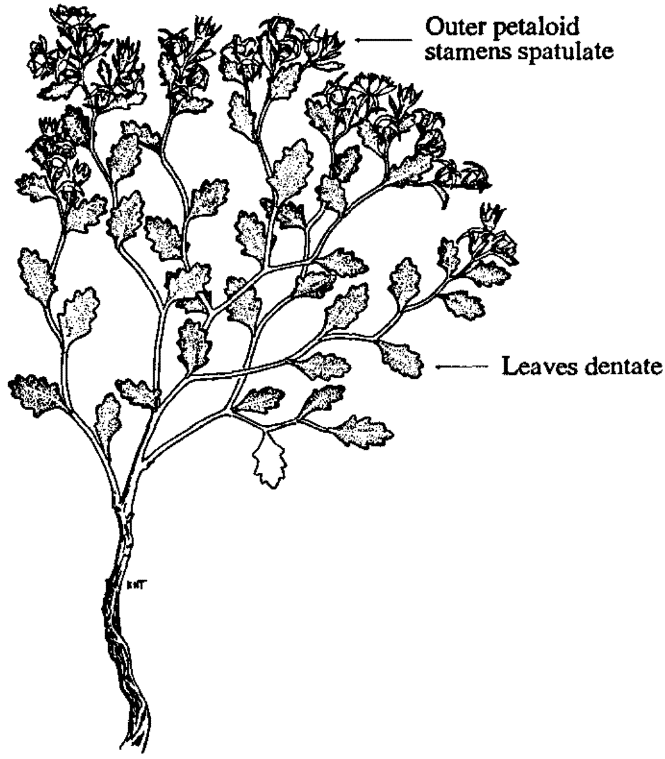
Management Responsibility: BLM-Moab District

Habitat: Sagebrush, rabbitbrush, and pinyon-juniper communities at about 6,200 feet elevation, on Mancos Shale and Price River formations.

Look-alikes: This variety differs from var. *multicaulis* by the leavaes that are trilobed, with the lateral lobes near the stem base and the apical lobe elongate.

Species
Distribution





MENTZELIA SHULTZIORUM

Scientific Name: *Mentzelia shultziorum* Prigge

Common Name Shultz blazing star

Family (Common Name): Loasaceae (Stickleaf Family)

Synonyms: None

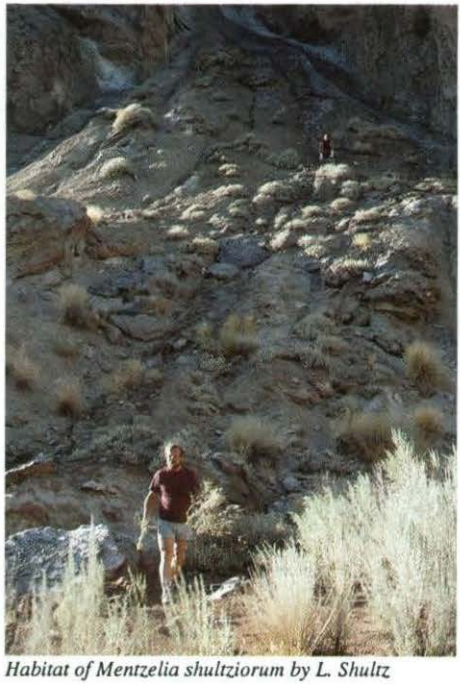
Global Distribution: Grand County, Utah; a Colorado Plateau endemic

Management Responsibility: BLM-Moab District

Habitat: Shadscale, eriogonum, ephedra community on the Cutler Formation (and Paradox?) along Onion Creek at 4,160 to 5,200 feet elevation, July-August.

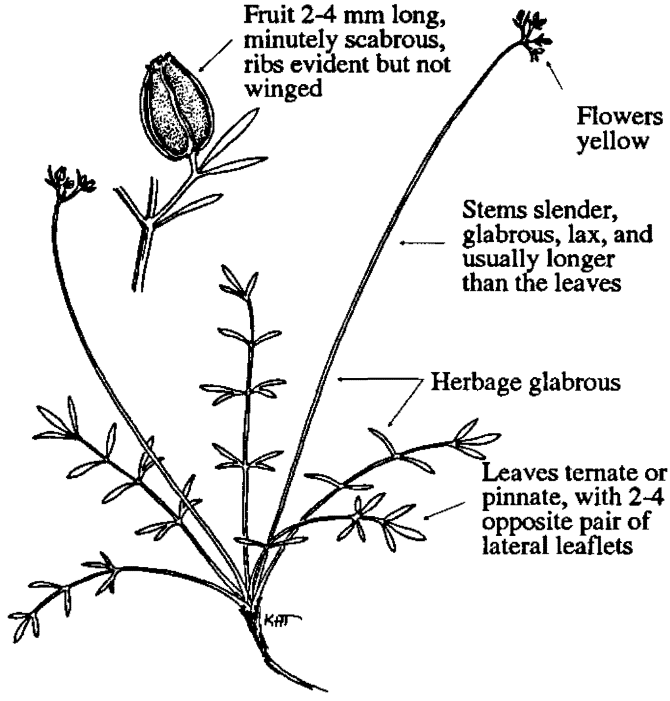
Look-alikes: The Shultz blazingstar differs from the closely allied *M. multicaulis* of Carbon, Duchesene, Emery, Piute, and Uinta counties by its merely dentate, not pinnatifid or trilobed, leaves and by the spatulate outer petaloid stamens.

Closeup of Mentzelia shultziorum by L. Shultz



Habitat of Mentzelia shultziorum by L. Shultz

Species
Distribution


Fruit 2-4 mm long, minutely scabrous, ribs evident but not winged
Flowers yellow
Stems slender, glabrous, lax, and usually longer than the leaves
Herbage glabrous
Leaves ternate or pinnate, with 2-4 opposite pair of lateral leaflets
KHT

MUSINEON LINEARE

Scientific Name: *Musineon lineare* (Rydb.) Mathias

Common Name: Narrow-leaved parsley, Wasatch musineon or Rydberg musineon

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

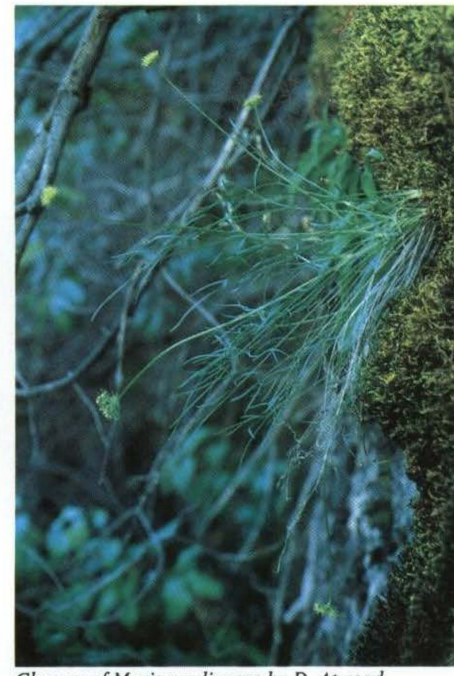
Synonyms: *Daucophyllum lineare* Rydb.

Global Distribution: Endemic to Northern Utah in Cache County

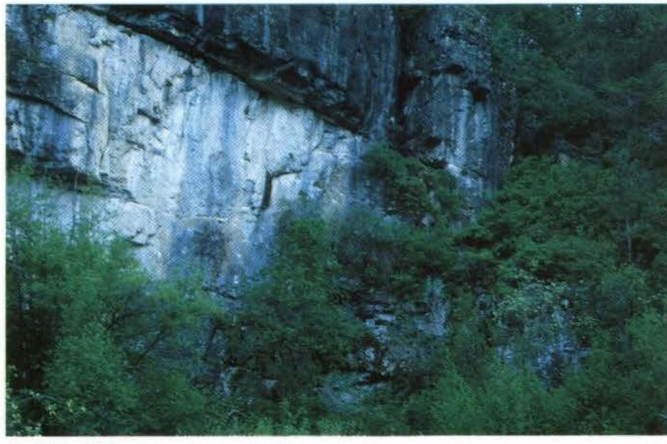
Management Responsibility: Wasatch-Cache NF, private and BLM-Salt Lake District?

Habitat: Limestone cliff faces, rock crevices, and ledges between 5,300 to 9,300 feet elevation, April-August.

Look-alikes: A distinct wholly glabrous species with mostly basal, pinnate to ternate leaves, leaflets 0.2-3 cm long, and ovate oblong, 2-4 mm long fruit.

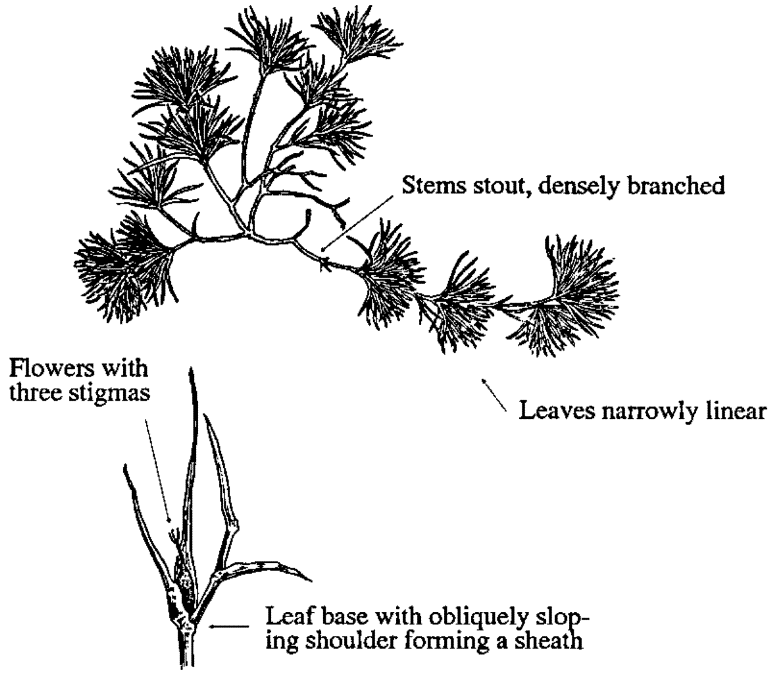


Closeup of Musineon lineare by D. Atwood



Habitat of Musineon lineare by D. Atwood

Species
Distribution


Stems stout, densely branched
Flowers with three stigmas
Leaves narrowly linear
Leaf base with obliquely sloping shoulder forming a sheath

NAJAS CAESPITOSA

Scientific Name: *Najas caespitosa* (Maguire) Reveal

Common Name: Fishlake naiad

Family (Common Name): Najadaceae (Water-Nymph Family)

Synonyms: *Najas flexilis* (Willd.) Rostk. & Schmidt ssp. *caespitosa* Maguire

Global Distribution: Known only from Pelican Point, Fish Lake, in Sevier County, Utah

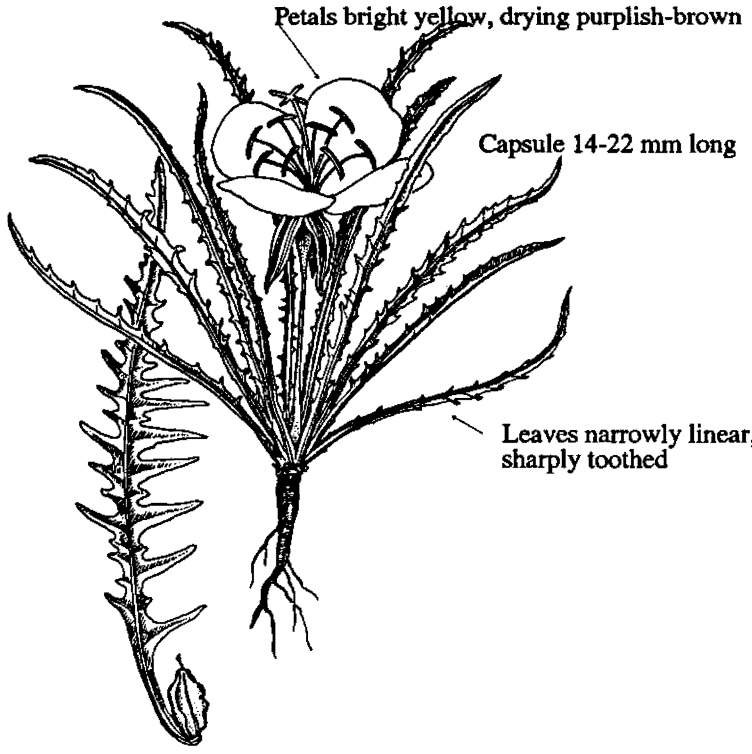
Management Responsibility: Fishlake NF

Habitat: Shallow water to about 9 inches at about 8,800 feet elevation, late July or August.

Look-alikes: Related to the *N. flexis* group, but distinguished by its smaller size, densely branched stout stems, narrowly linear leaves, the leaf base with obliquely sloping shoulder forming a sheath, and flowers with 3 stigmas.

Habitat of Najas caespitosa by D. Atwood

Species
Distribution



OENOTHERA FLAVA VAR. *ACUTISSIMA*

Scientific Name: *Oenothera flava* (A. Nels.) Garrett var. *acutissima* (W. L. Wagner) Welsh

Common Name: Yellow evening-primrose

Family (Common Name): Onagraceae (Evening-Primrose Family)

Synonyms: *Oenothera acutissima* W. L. Wagner

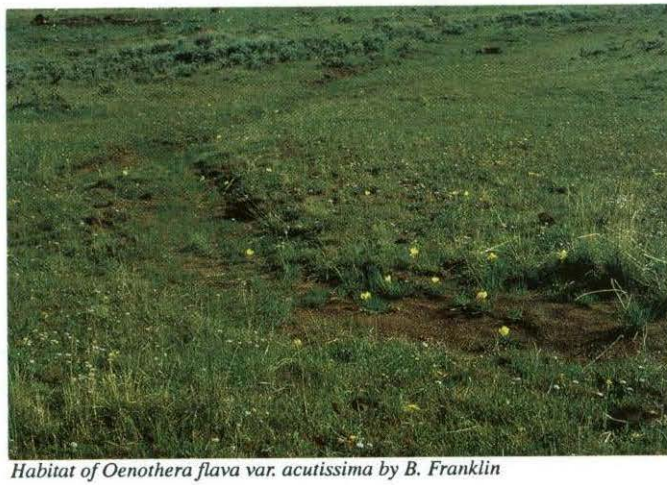
Global Distribution: Daggett and Uintah counties, Utah; western Colorado

Management Responsibility: Ashley NF, BLM-Vernal District, Dinosaur NM and private

Habitat: Sagebrush, grass-forb, and ponderosa pine communities, often where temporarily moist in spring and early summer between 6,000 to 7,800 feet elevation, May-June.

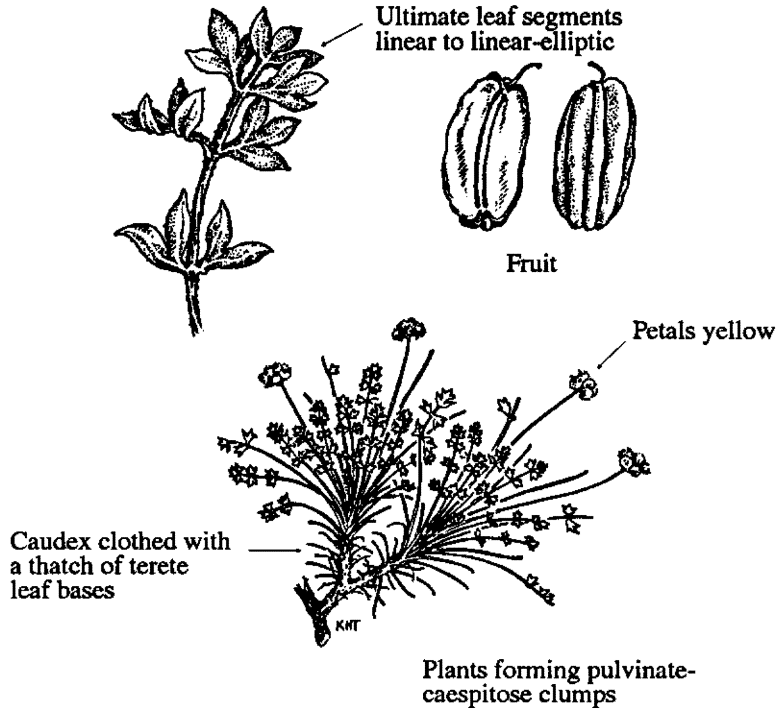
Look-alikes: Similar to var. *flava*, but different in the large showy yellow flowers, the petals 2.8-8.5 cm long.

Closeup of Oenothera flava var. acutissima by B. Franklin



Habitat of Oenothera flava var. acutissima by B. Franklin

Species
Distribution



OREOXIS TROTTERI

Scientific Name: *Oreoxis trotteri* Welsh and Goodrich

Common Name: Trotter oreoxis

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: None

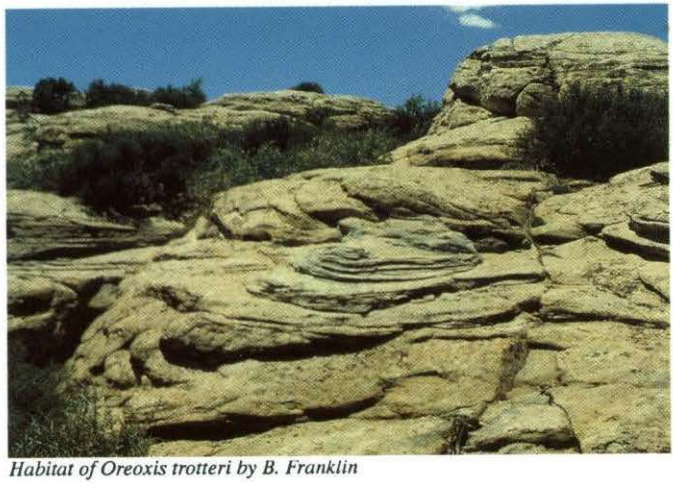
Global Distribution: Endemic to Utah in Grand County

Management Responsibility: BLM-Moab District, Arches? and Canyonlands? NP's.

Habitat: Warm desert shrub and mixed juniper communities at 4,750 to 5,000 feet elevation, late April-mid June.

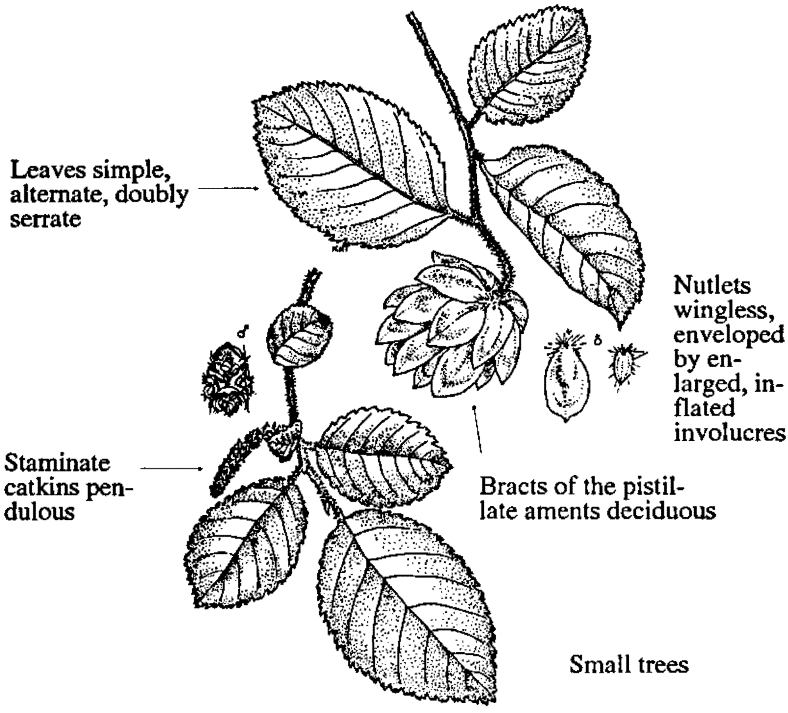
Look-alikes: Distinct from the other two species in the pulvinate-caespitose, clump-forming habit (up to 30 cm across), caudex with a thatch of terete leaf bases, and the ultimate leaf segments elliptic to cuneate-ovate.

Closeup of Oreoxis trotteri by B. Franklin



Habitat of Oreoxis trotteri by B. Franklin

Species
Distribution


Leaves simple, alternate, doubly serrate
Nutlets wingless, enveloped by enlarged, inflated involucres
Staminate catkins pendulous
Bracts of the pistillate aments deciduous
Small trees

OSTRYA KNOWLTONII

Scientific Name: *Ostrya knowltonii* Cov.

Common Name: Western hophornbeam

Family (Common Name): Betulaceae (Birch Family)

Synonyms: None

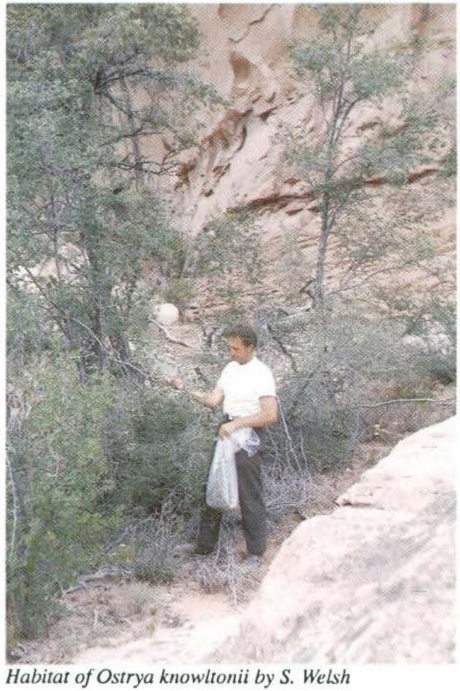
Global Distribution: Known from Utah, Arizona, New Mexico, and Texas

Management Responsibility: Canyonlands and Capitol Reef NP's, Glen Canyon NRA and BLM-Moab District

Habitat: Bases of monoliths, defiles and hanging gardens in sandstone areas along the Colorado River Drainage at 4,010 to 5,610 feet elevation, July.

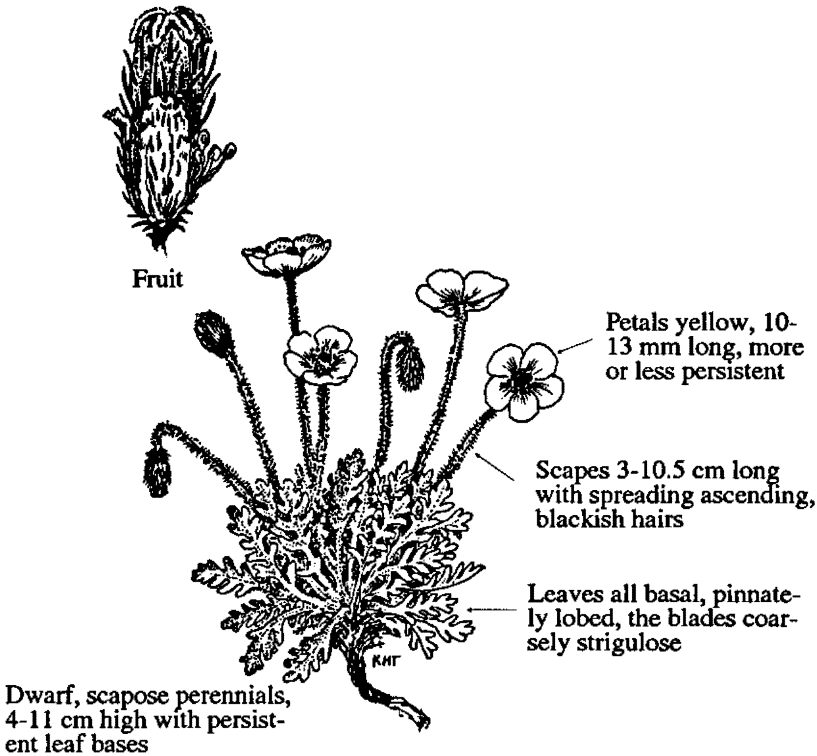
Look-alikes: None

Closeup of Ostrya knowltonii by S. Welsh



Habitat of Ostrya knowltonii by S. Welsh

Species
Distribution


Fruit
Petals yellow, 10-13 mm long, more or less persistent
Scapes 3-10.5 cm long with spreading ascending, blackish hairs
Leaves all basal, pinnately lobed, the blades coarsely strigulose
Dwarf, scapose perennials, 4-11 cm high with persistent leaf bases
KHT

PAPAVER RADICATUM VAR. *PYGMAEUM*

Scientific Name: *Papaver radicatum* Rottb. var. *pygmaeum* (Rydb.) Welsh

Common Name: Arctic poppy or Alpine poppy

Family (Common Name): Papaveraceae (Poppy Family)

Synonyms: *Papaver pygmaeum* Rydb.

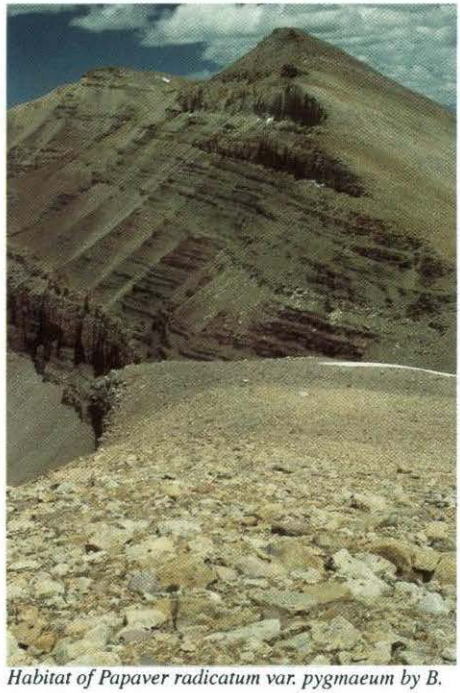
Global Distribution: The species occurs from the Arctic and boreal regions of North America, extending south to Colorado; var. *pygmaeum* is known from the Rocky Mountains of southern Alberta and northern Montana, but only from the Uinta Mountains in Duchesne and Summit counties, Utah.

Management Responsibility: Ashley and Wasatch-Cache NF's

Habitat: Rockstripes in alpine tundra communities between 11,100 to 12,810 feet elevation, July-August.

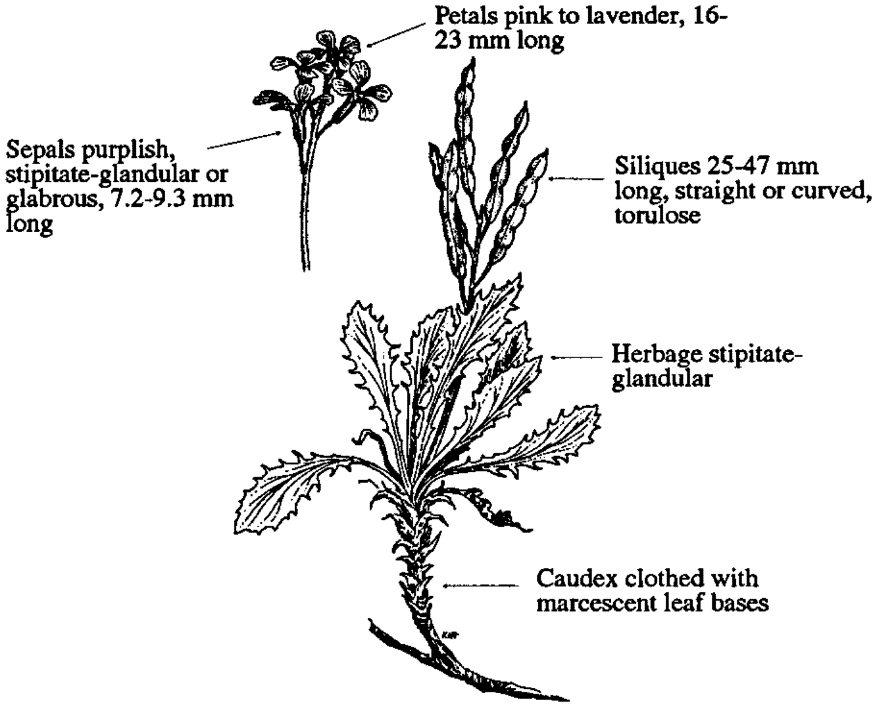
Look-alikes: Distinct from other Utah species by the dwarf scapose perennial habit, basal leaves, and showy yellow petals.

Closeup of Papaver radicatum var. pygmaeum by B. Franklin



Habitat of Papaver radicatum var. pygmaeum by B. Franklin

Species Distribution


Petals pink to lavender, 16-23 mm long
Sepals purplish, stipitate-glandular or glabrous, 7.2-9.3 mm long
Siliques 25-47 mm long, straight or curved, torulose
Herbage stipitate-glandular
Caudex clothed with marcescent leaf bases

PARRYA RYDBERGII

Scientific Name: *Parrya rydbergii* Botsch.

Common Name: Uinta parrya or naked-stemmed wall flower

Family (Common Name): Brassicaceae or Cruciferae (Mustard Family)

Synonyms: *Parrya platycarpa* Rydb., not Hook. f. & Thomas

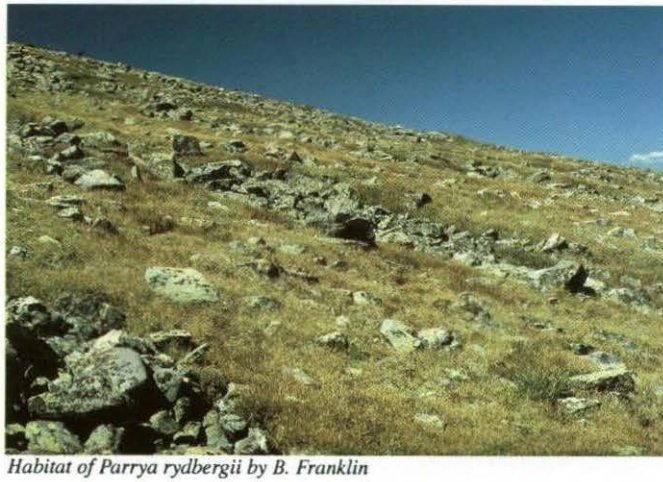
Global Distribution: Endemic to the Uinta Mountains in Daggett, Duchesne, Summit, and Uintah counties of Northeastern Utah

Management Responsibility: Ashley and Wasatch-Cache NF's

Habitat: Krumholz and alpine meadow communities on Precambrian quartzite between 10,500 to 12,200 feet elevation, June-July.

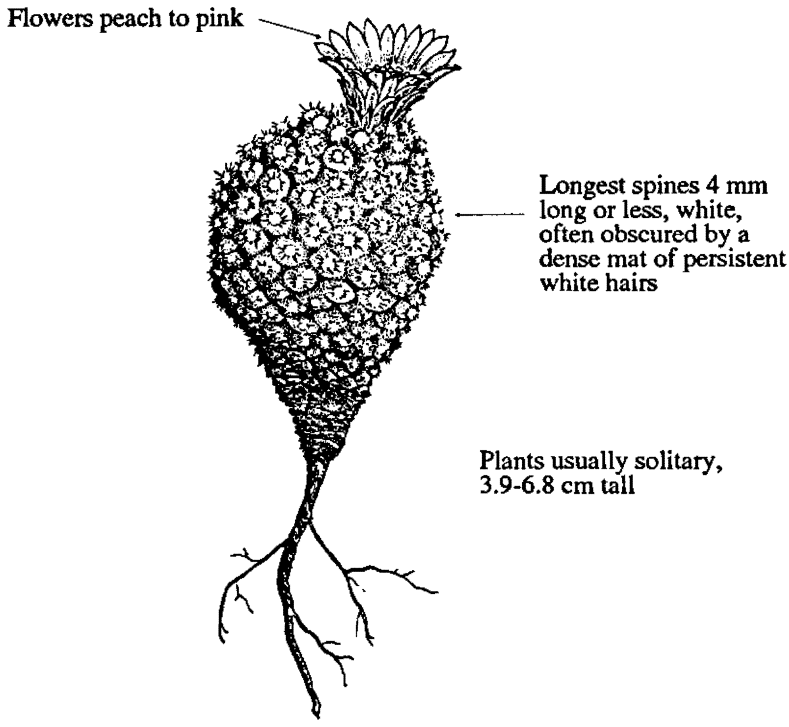
Look-alikes: A distinct high elevation low rosulate perennial with a persistent thatch of old leaf bases, scapose stems, herbage stipitate-glandular, the fruiting pedicels steeply ascending, large pink-lavender petals (16-23 mm long) and long siliques (2.5-4.7 cm long).

Closeup of Parrya rydbergii by B. Franklin



Habitat of Parrya rydbergii by B. Franklin

Species Distribution


Flowers peach to pink
Longest spines 4 mm long or less, white, often obscured by a dense mat of persistent white hairs
Plants usually solitary, 3.9-6.8 cm tall

PEDIOCACTUS WINKLERI

Scientific Name: *Pediocactus winkleri* Heil

Common Name: Winkler footcactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: None

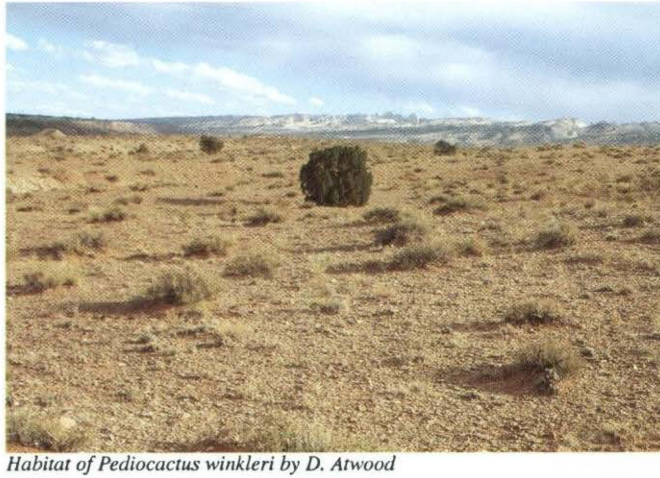
Global Distribution: Endemic to Utah in Wayne County

Management Responsibility: BLM-Moab and Richfield Districts and Capitol Reef NP

Habitat: Salt desert shrub communities between 4,790 to 5,210 feet elevation, late March-mid May.

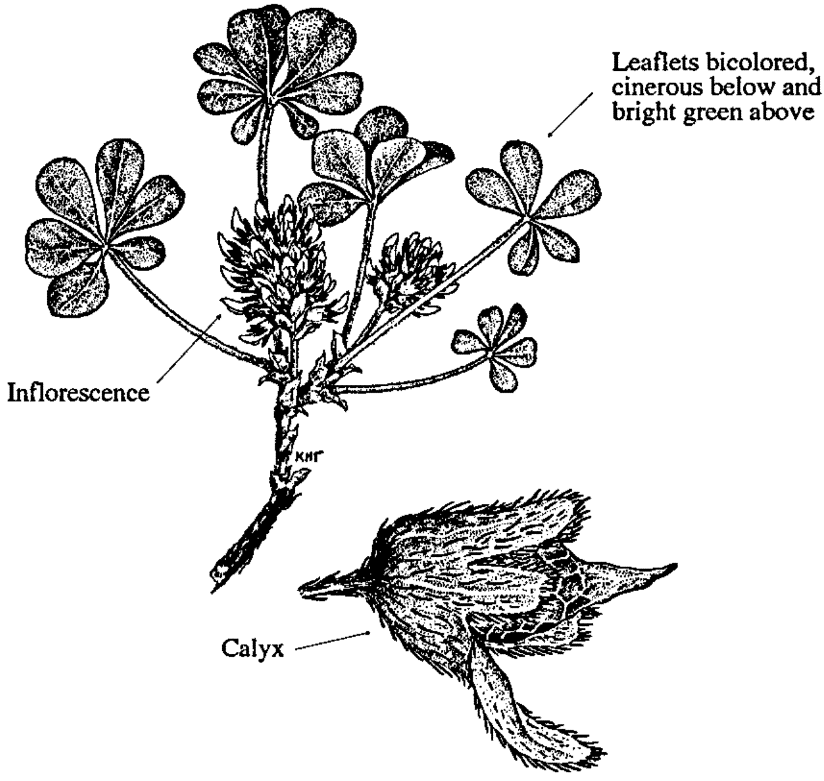
Look-alikes: Similar to *P. despainii*, but differs in the monocephalous habit, smaller stems (2-2.6 cm in diameter vs 3-6 cm), smaller flowers (1.7-3 cm broad vs 2.5-4 cm), longer capsules (7-9 mm long vs 5.5-6 mm).

Closeup of Pediocactus winkleri by M. Poulson



Habitat of Pediocactus winkleri by D. Atwood

Species
Distribution



PEDIOMELUM EPIPSILUM

Scientific Name: *Pediomelum epipsilum* (Barneby) Welsh

Common Name: Kane breadroot

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Psoralea epipsila* Barneby

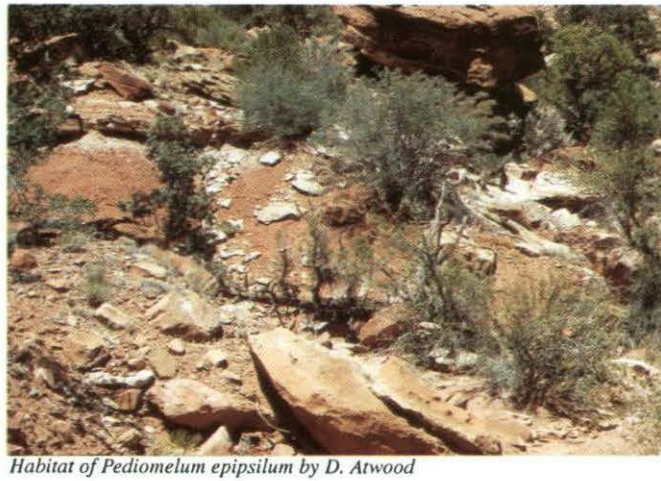
Global Distribution: Kane County, Utah and in adjacent Arizona, a Colorado Plateau endemic

Management Responsibility: BLM-Cedar City District, private

Habitat: Pinyon-juniper woodland at about 5,480 feet elevation on Chinle and Moenkope formations, May-June.

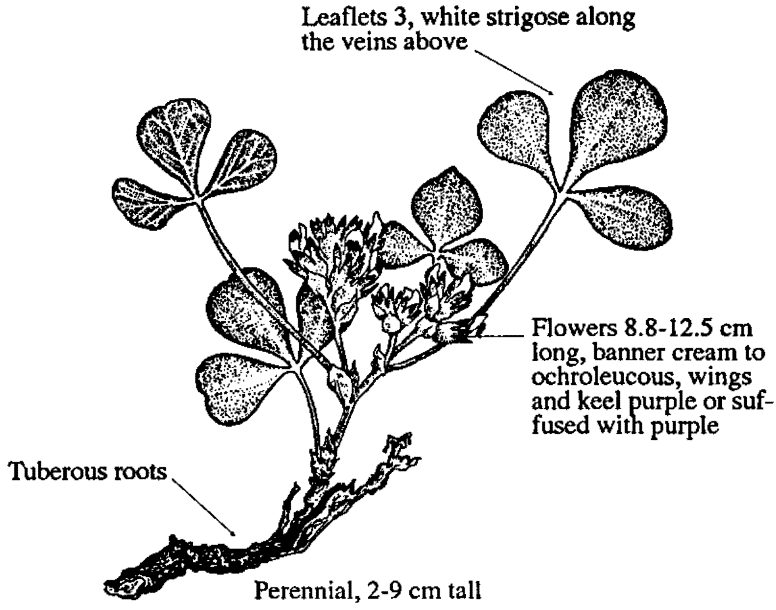
Look-alikes: The conspicuously bicolored leaflets of this species distinguish it from all other members of the genus in Utah.

Closeup of Pediomelum epipsilum by D. Atwood



Habitat of Pediomelum epipsilum by D. Atwood

Species
Distribution


Leaflets 3, white strigose along the veins above
Flowers 8.8-12.5 cm long, banner cream to ochroleucous, wings and keel purple or suffused with purple
Tuberous roots
Perennial, 2-9 cm tall

PEDIOMELUM PARIENSE

Scientific Name: *Pediomelum pariense* (Welsh & Atwood) Welsh

Common Name: Paria breadroot

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Psoralea pariensis* Welsh & Atwood

Global Distribution: A Utah Endemic in Garfield, Washington, and Kane counties

Management Responsibility: Dixie NF, Bryce Canyon and Zion NP's, BLM-Cedar City District and private

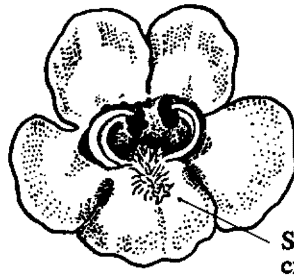
Habitat: Ponderosa pine and pinyon-juniper communities on calcareous or sandy soils between 5,575 to 8,000 feet elevation, June-July.

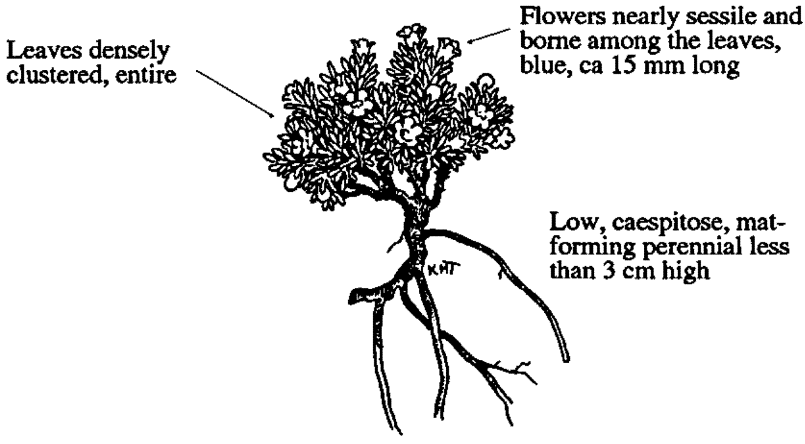
Look-alikes: Differing from *P. megalanthum* in having shorter flowers, showy white veins on the upper side of the leaves, and in distribution.

Closeup of Pediomelum pariense by D. Atwood

Habitat of Pediomelum pariense by D. Atwood

Species
Distribution




Leaves densely clustered, entire
Flowers nearly sessile and borne among the leaves, blue, ca 15 mm long
Low, caespitose, mat-forming perennial less than 3 cm high

PENSTEMON ACAULIS VAR. ACAULIS

Scientific Name: *Penstemon acaulis* L. O. Williams var. *acaulis*

Common Name: Stemless penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

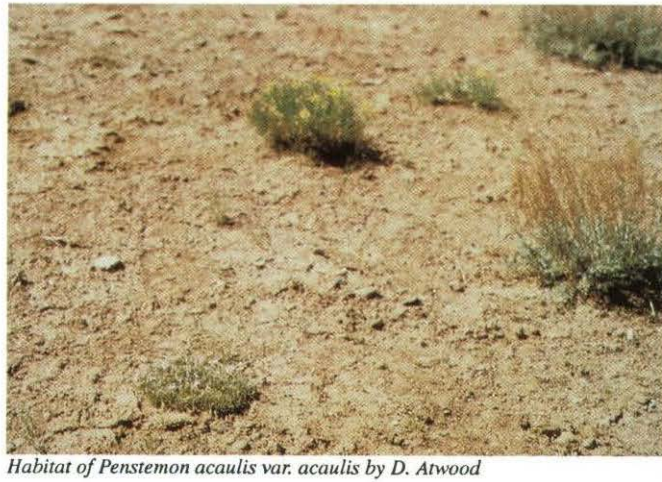
Global Distribution: Endemic to Daggett County, Utah and Sweetwater County, Wyoming

Management Responsibility: Ashley NF, BLM-Vernal District, State Trust Lands and private

Habitat: Pinyon-juniper and sagebrush-grass communities on semi-barren substrates between 5,840 to 7,285 feet elevation, June-July.

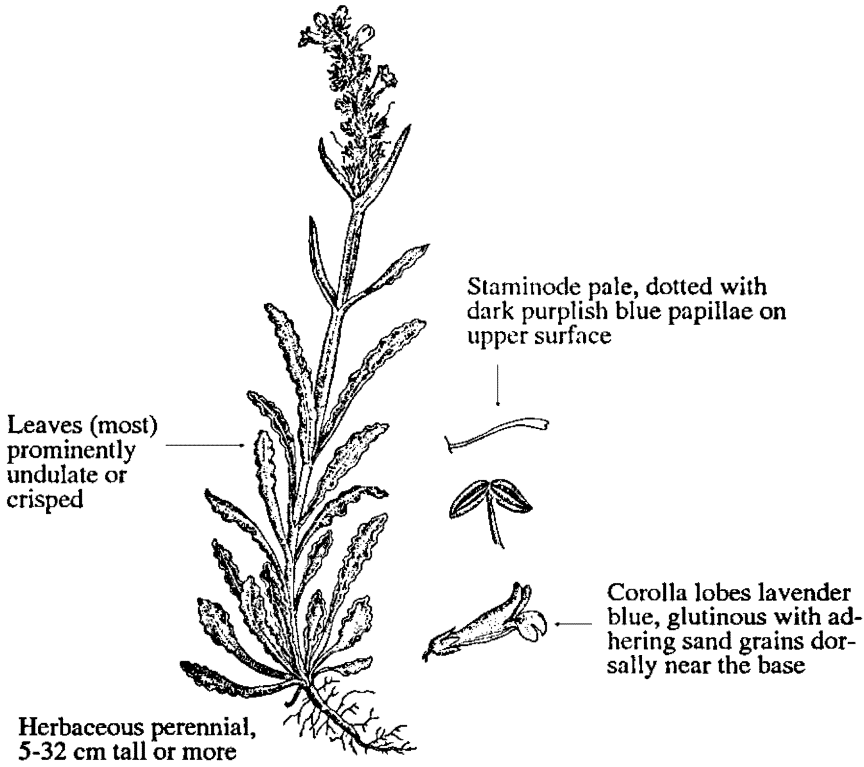
Look-alikes: A distinct low depressed acaulescent perennial forming compact mats and less than 3 cm tall, with linear densely clustered leaves, and flowers that overtop the clustered leaves. Similar to var. *yampaensis*, but the leaves less than 1.6 mm wide and 2 cm long.

Closeup of Penstemon acaulis var. acaulis by S. Welsh



Habitat of Penstemon acaulis var. acaulis by D. Atwood

Species Distribution


Staminode pale, dotted with dark purplish blue papillae on upper surface
Leaves (most) prominently undulate or crisped
Corolla lobes lavender blue, glutinous with adhering sand grains dorsally near the base
Herbaceous perennial, 5-32 cm tall or more

PENSTEMON AMMOPHILUS

Scientific Name: *Penstemon ammophilus* N. Holmgren & L. Shultz

Common Name: Sandloving penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

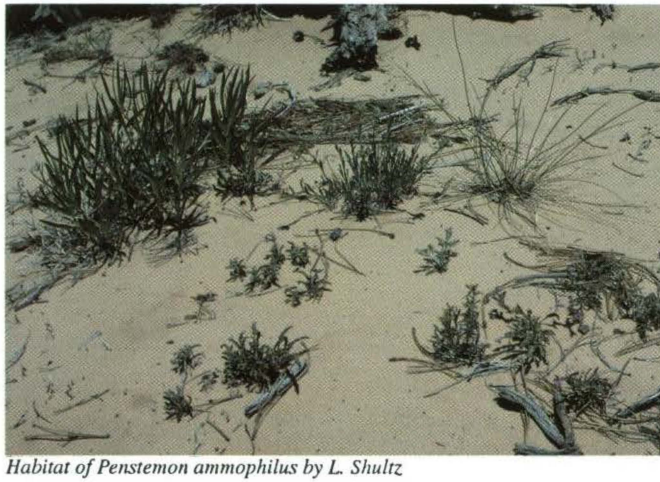
Global Distribution: Known only from southwestern Utah in Garfield, Kane and Washington counties

Management Responsibility: BLM-Cedar City District and Zion NP

Habitat: In blowsand derived from Navajo Sandstone, where long-lived clumps act as sand stabilizers, in ponderosa pine and mixed shrub communities at 5,400-6,600 feet elevation, late May-June.

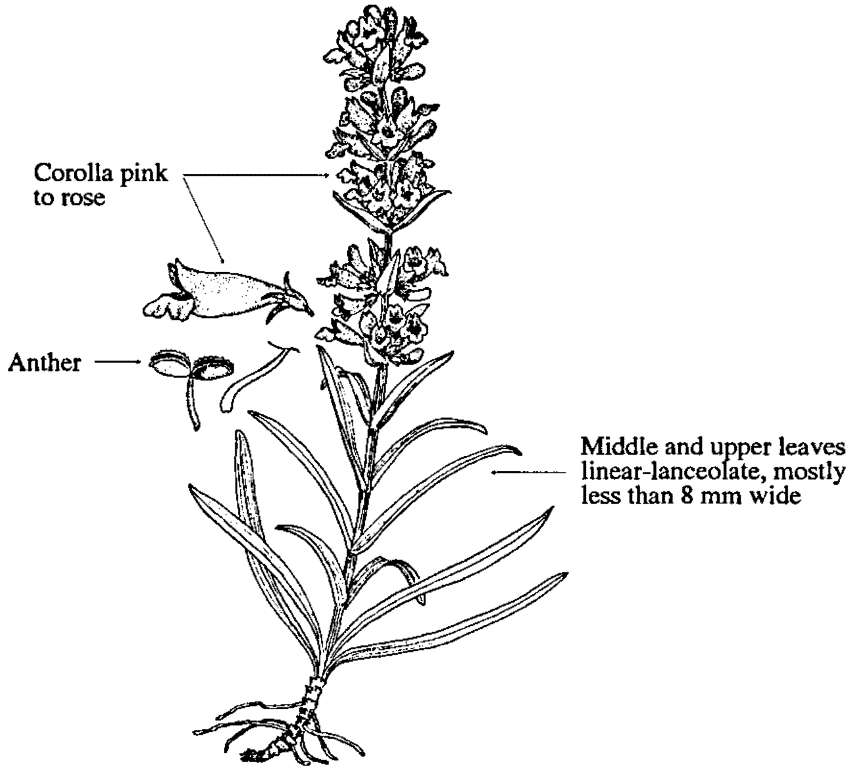
Look-alikes: A distinct species with undulate leaf margins, often fistulose stems, and papillate-glutinous herbage.

Closeup of Penstemon ammophilus by L. Shultz



Habitat of Penstemon ammophilus by L. Shultz

Species
Distribution



PENSTEMON ANGUSTIFOLIUS VAR. *DULCIS*

Scientific Name: *Penstemon angustifolius* Pursh var. *dulcis* Neese

Common Name: Neese narrowleaf penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

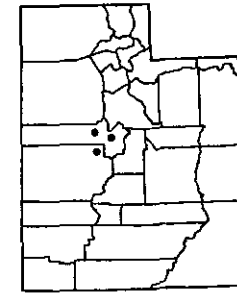
Global Distribution: Juab and Millard counties, Utah; a Great Basin endemic

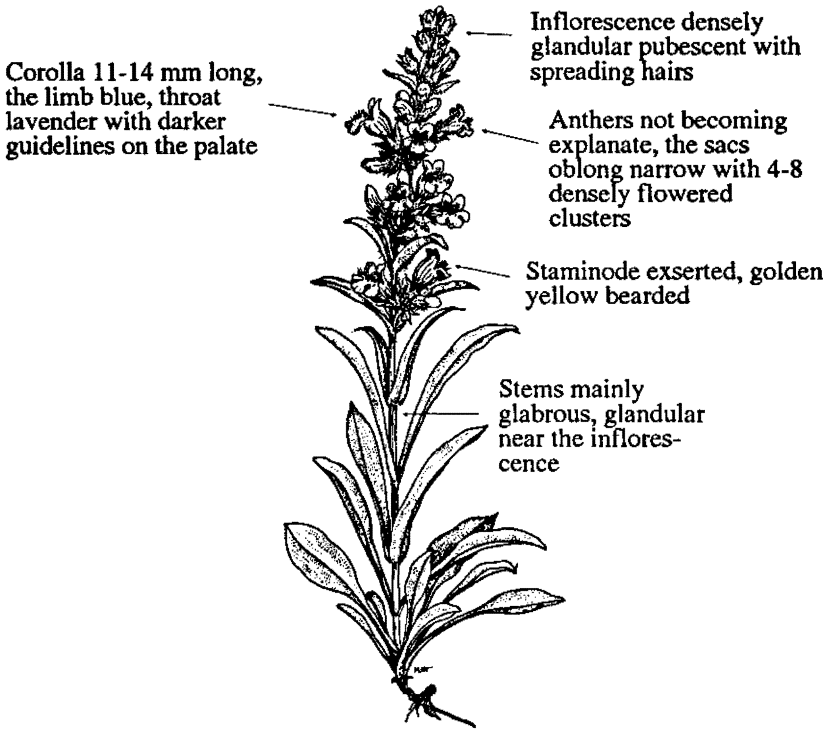
Management Responsibility: BLM-Richfield District

Habitat: Four-wing saltbush, sagebrush-eriogonum, and juniper communities in dune sands at 4,600 to 5,400 feet elevation, May-June.

Look-alikes: This phase of the narrow-leaf penstemon is distinguished from all other phases of the species by its pink to rose corolla, not changing to violet or bluish on drying, and lower and middle cauline leaves mostly linear-lanceolate, seldom over 8mm wide.

Species
Distribution




Corolla 11-14 mm long, the limb blue, throat lavender with darker guidelines on the palate
Inflorescence densely glandular pubescent with spreading hairs
Anthers not becoming explanate, the sacs oblong narrow with 4-8 densely flowered clusters
Staminode exserted, golden yellow bearded
Stems mainly glabrous, glandular near the inflores-cence

PENSTEMON ATWOODII

Scientific Name: *Penstemon atwoodii* Welsh

Common Name: Atwood's Penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

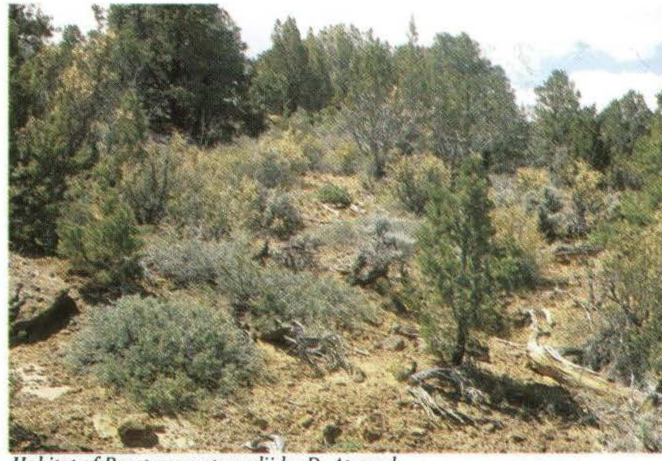
Synonyms: None

Global Distribution: Known only from Kane and Garfield counties, Utah

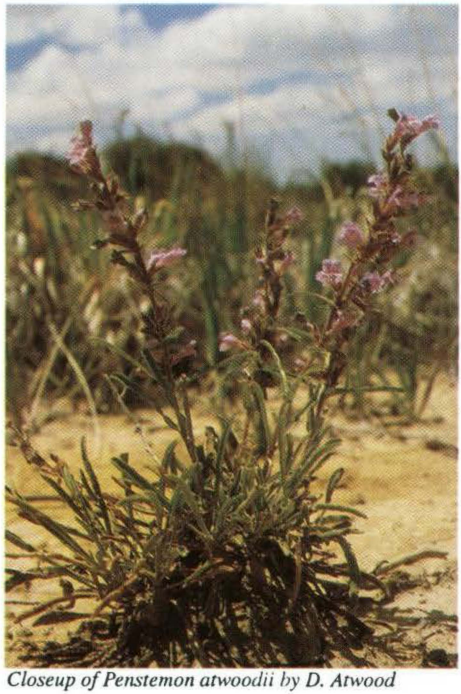
Management Responsibility: Glen Canyon NRA? and BLM-Cedar City District

Habitat: Kaiparowits, Wahweap and Straight Cliffs Formations, grayish sand and clay loam; ponderosa pine and pinyon-juniper woodlands at 6,200 to 8,000 feet elevation, June.

Look-alikes: Related to *P. jamesii*, it is easily distinguished by its white glandular pubescence.

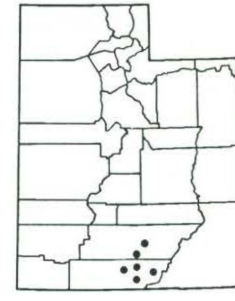


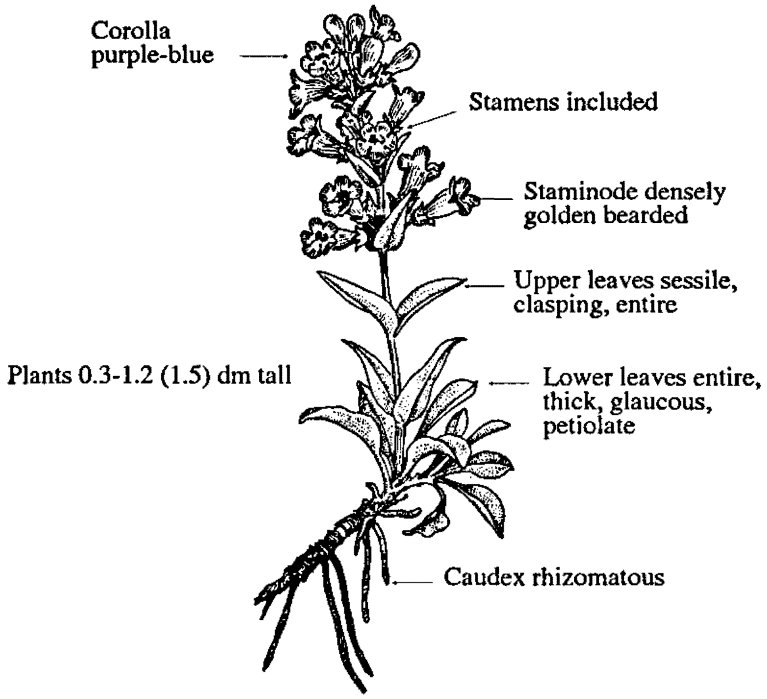
Habitat of Penstemon atwoodii by D. Atwood



Closeup of Penstemon atwoodii by D. Atwood

Species Distribution





PENSTEMON BRACTEATUS

Scientific Name: *Penstemon bracteatus* Keck

Common Name: Red Canyon beardtongue or Platy penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

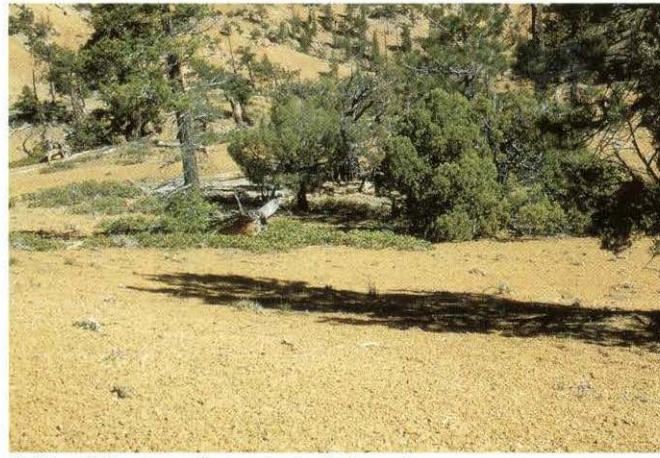
Synonyms: None

Global Distribution: Endemic to Utah in Garfield County

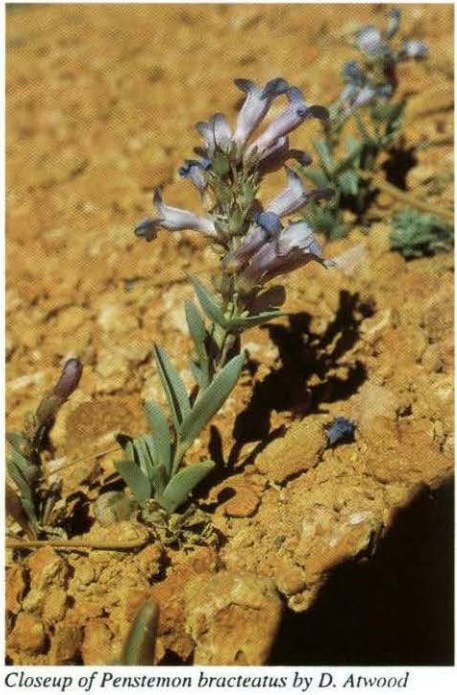
Management Responsibility: Dixie NF, Bryce Canyon NP, State Trust Lands, and private

Habitat: Ponderosa pine, pinyon-juniper, limber pine, and bristlecone pine-manzanita communities on the pink and white limestone members of the Wasatch Formation between 6,900 to 8,320 feet elevation, May-July.

Look-alike: Distinct in its low stature (0.3-1.5 dm high), the stems often arising from an elongate, spreading rhizomatous caudex, and small basal leaves (1-3 cm long). Easily recognized from other species in the area.

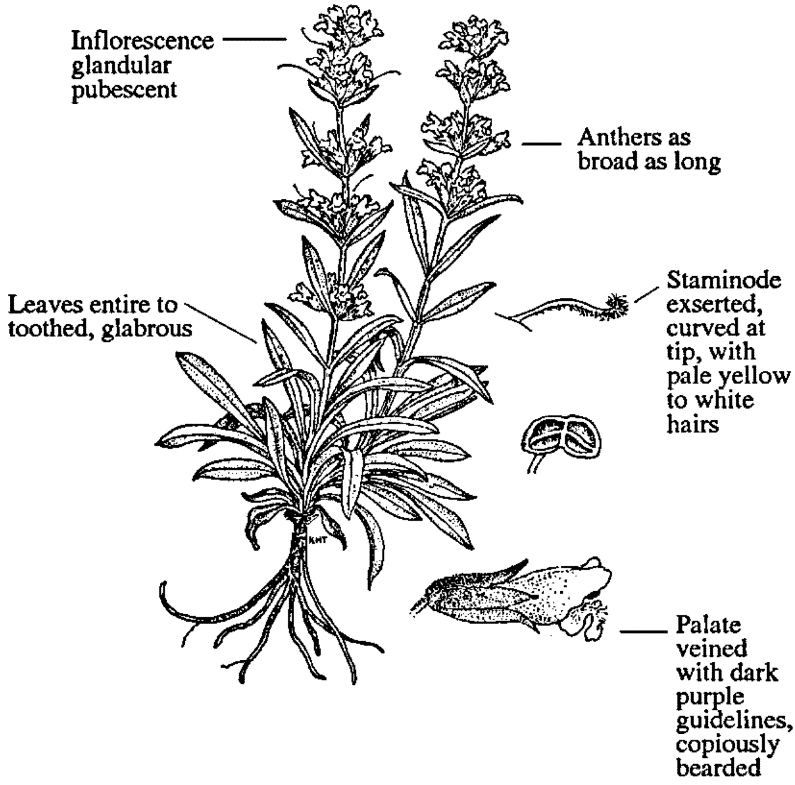


Habitat of Penstemon bracteatus by D. Atwood



Closeup of Penstemon bracteatus by D. Atwood

Species
Distribution


Inflorescence glandular pubescent
Anthers as broad as long
Staminode exserted, curved at tip, with pale yellow to white hairs
Leaves entire to toothed, glabrous
Palate veined with dark purple guidelines, copiously bearded

PENSTEMON CONCINNUS

Scientific Name: *Penstemon concinnus* Keck

Common Name: Elegant penstemon or Tunnel Springs beardtongue

Family (Common Name): Scrophulariacae (Figwort Family)

Synonyms: None

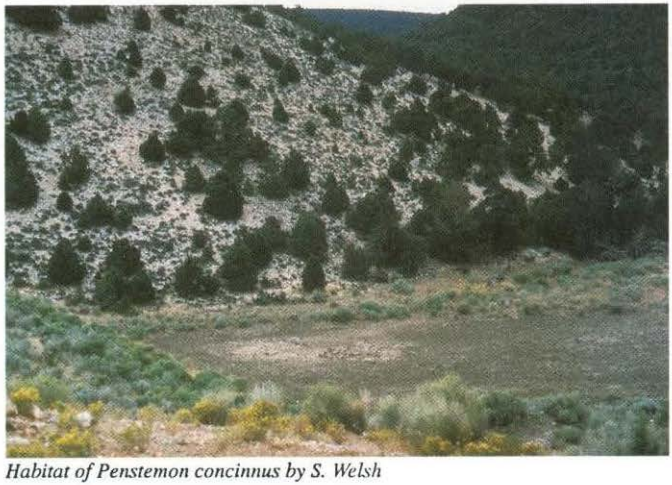
Global Distribution: Millard, Iron, and Beaver counties, Utah; White Pine County, Nevada

Management Responsibility: Desert Range Experiment Station, BLM-Cedar City and Richfield District and State Trust Lands

Habitat: Pinyon-juniper and sagebrush communities on calcareous or igneous gravels, usually on pale limestone parent material between 4,955 to 7,545 feet elevation, May-July.

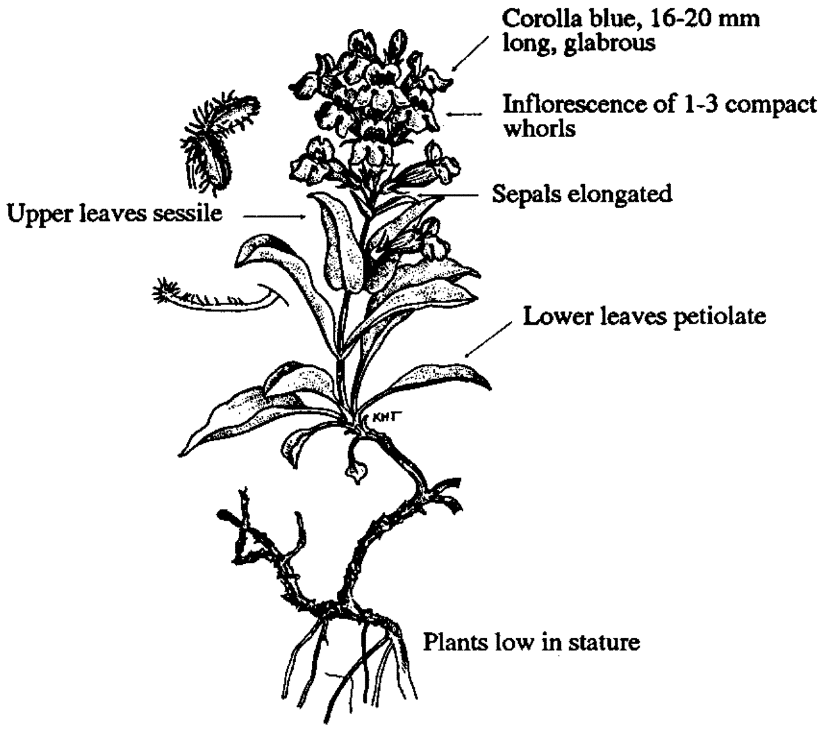
Look-alikes: Close to *P. miser,* but distinct in its shorter corolla, white bearded staminode, glabrous leaves and pale green herbage.

Closeup of Penstemon concinnus by D. Atwood



Habitat of Penstemon concinnus by S. Welsh

Species
Distribution



PENSTEMON CYANANTHUS VAR. COMPACTUS

Scientific Name: *Penstemon cyananthus* Hook. var. *compactus* (Crosswhite) Neese

Common Name: Cache beardtongue

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: *Penstemon compactus* Crosswhite, *P. cyananthus* Hook. subsp. *compactus* Keck

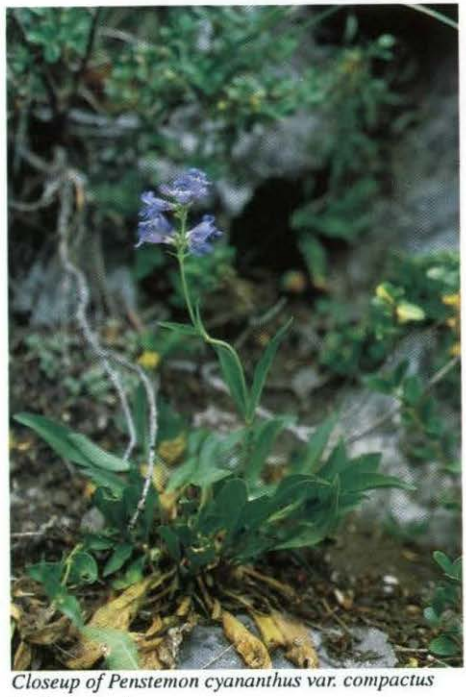
Global Distribution: Cache County, Utah and adjacent Franklin County, Idaho

Management Responsibility: Wasatch-Cache NF, State Trust Lands? and private?

Habitat: Openings in coniferous communities on limestone and dolomite parent material between 6,955 to 9,450 feet elevation, June-August.

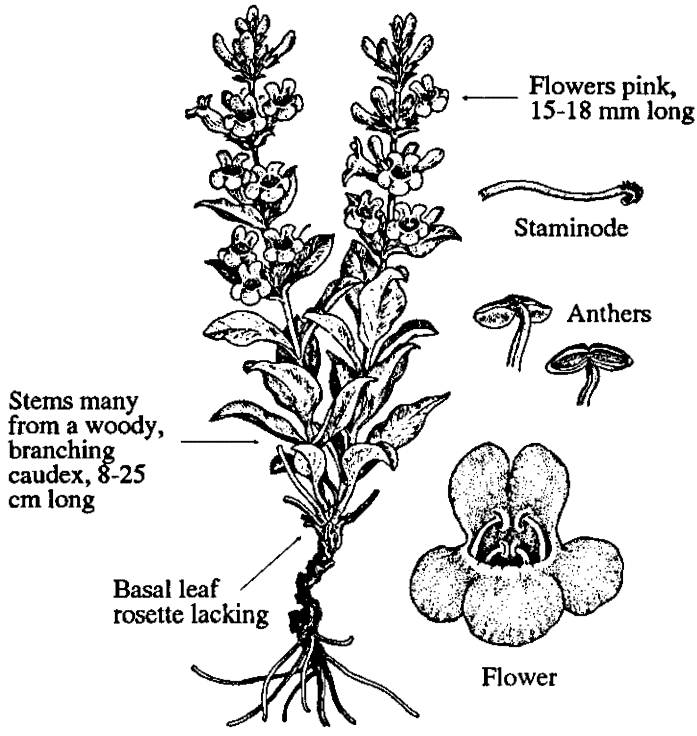
Look-alikes: Similar to the other varieties, but different in the dwarfer habit (mostly 1-2.5 dm tall), the stems decumbent to ascending, commonly folded leaves, obscurely glandular calyx, and reduced inflorescence.

Habitat of Penstemon cyananthus var. compactus by D. Atwood



Closeup of Penstemon cyananthus var. compactus by D. Atwood

Species Distribution



PENSTEMON FLOWERSII

Scientific Name: *Penstemon flowersii* Neese & Welsh

Common Name: Flowers penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Duchesne and Uintah counties, Utah; clay badlands in the vicinity of Roosevelt, a Uinta Basin endemic

Management Responsibility: BLM-Vernal District, Ute TL-North Unit, private

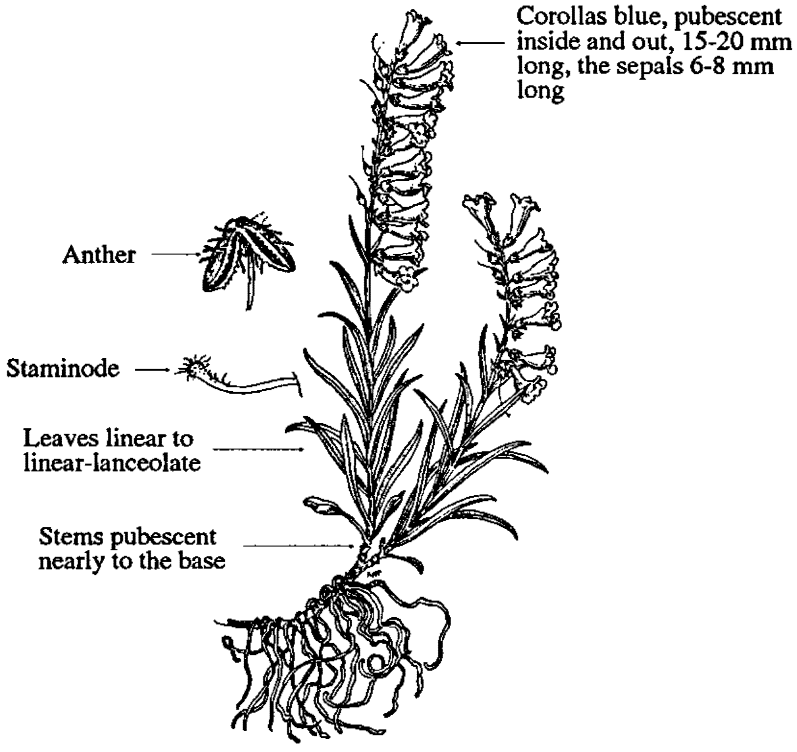
Habitat: Shadscale and salt desert communities at 5,000 to 5,400 feet elevation, May-June.

Look-alikes: The soft pink flowers borne on plants with basal leaves lacking or poorly developed are distinctive for this narrowly restricted plant of the Roosevelt/Myton vicinity.

Habitat of Penstemon flowersii by D. Atwood

Closeup of Penstemon flowersii by D. Atwood

Species
Distribution


Corollas blue, pubescent inside and out, 15-20 mm long, the sepals 6-8 mm long
Anther
Staminode
Leaves linear to linear-lanceolate
Stems pubescent nearly to the base

PENSTEMON GIBBENSII

Scientific Name: *Penstemon gibbensii* Dorn

Common Name: Gibbens penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

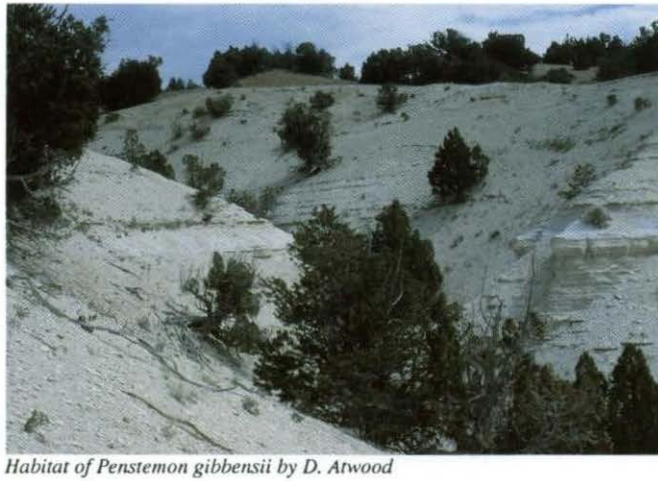
Global Distribution: Daggett County, Utah, Moffatt and Rio Blanco counties, Colorado, and Carbon and Sweetwater counties, Wyoming

Management Responsibility: BLM-Vernal District, Dinosaur NM? (Colorado), State, and private?

Habitat: Sandy or shaly (often Green River Shale) bluffs and slopes with juniper, thistle, *Eriogonnum, Elymus*, serviceberry, rabbitbrush, and-*Thermopsis* at 5,500 to 6,400 feet elevation, June.

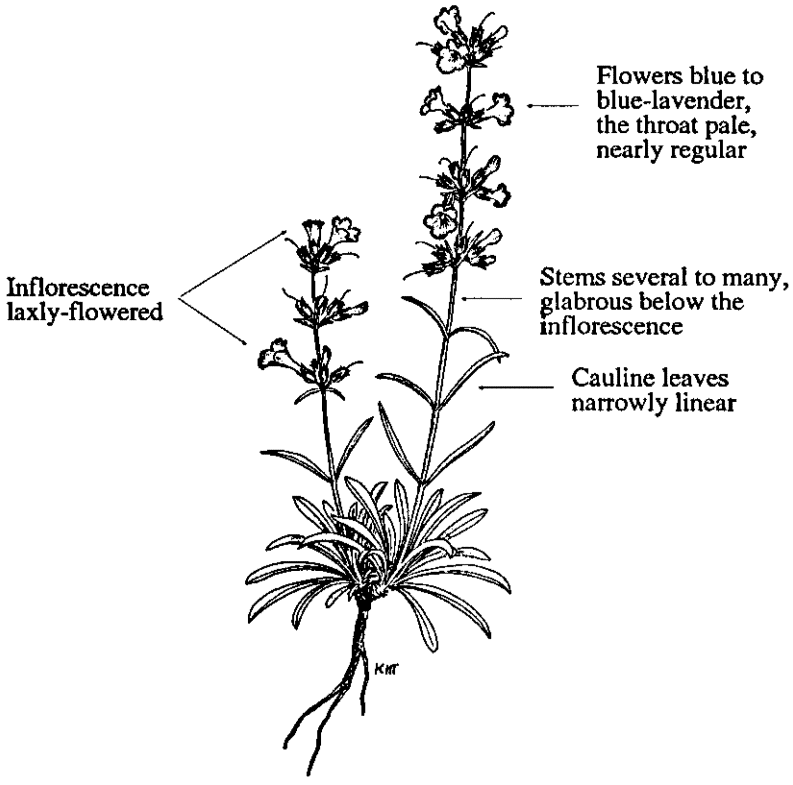
Look-alikes: Similar to *P. fremontii* in the glandular inflorescence, longer sepals, and mostly narrower leaves.

Closeup of Penstemon gibbensii by D. Atwood



Habitat of Penstemon gibbensii by D. Atwood

Species
Distribution


Flowers blue to blue-lavender, the throat pale, nearly regular
Inflorescence laxly-flowered
Stems several to many, glabrous below the inflorescence
Cauline leaves narrowly linear

PENSTEMON GOODRICHII

Scientific Name: *Penstemon goodrichii* N. Holmgren

Common Name: Goodrich penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Duchesne and Unitah counties, Utah; known only from the Lapoint-Tridell-Whiterocks area, a Uinta Basin endemic

Management Responsibility: BLM-Vernal District, Ute TL-North Unit

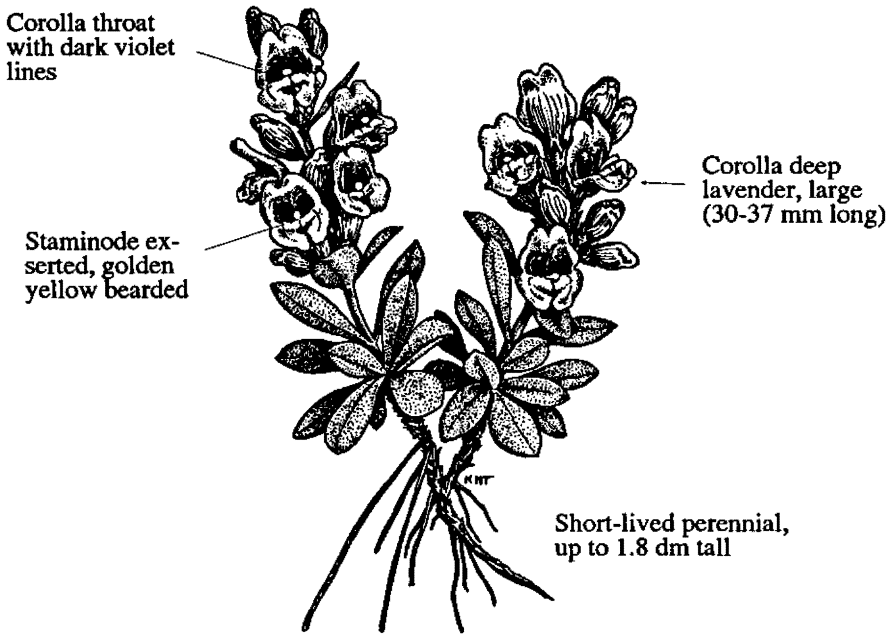
Habitat: Blue gray to reddish, clay-impregnated badlands of the Duchesne river Formation in shadscale and juniper-mountain mahogany communities at 5,590 to 6,215 feet elevation, late May-June.

Look-alikes: Similar to *P. marcusii* of Carbon and Emery counties, but stems glabrous below the inflorescence.

Habitat of Penstemon goodrichii by D. Atwood

Closeup of Penstemon goodrichii by E. Neese

Species
Distribution


Corolla throat with dark violet lines
Staminode exserted, golden yellow bearded
Corolla deep lavender, large (30-37 mm long)
Short-lived perennial, up to 1.8 dm tall

PENSTEMON GRAHAMII

Scientific Name: *Penstemon grahamii* Keck in Graham

Common Name: Graham beardtongue or Uinta Basin penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

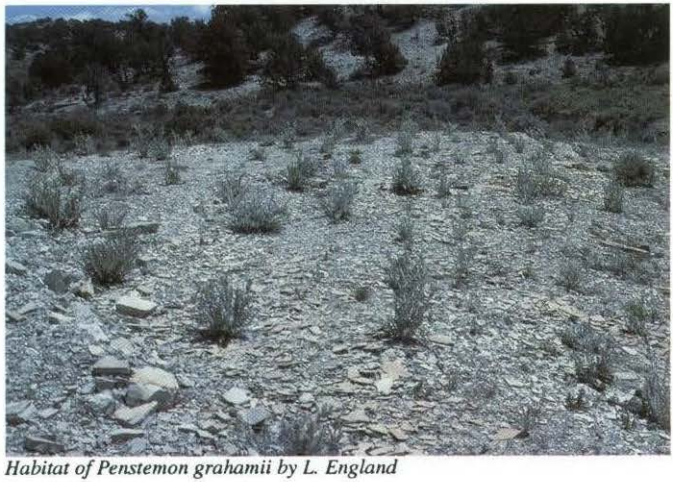
Global Distribution: Restricted to the Uintah Basin in east Duchesne and Uintah counties, Utah; adjacent Rio Blanco County, Colorado

Management Responsibility: BLM-Vernal District, Ute TL-Hill Creek Extension?, State Trust Lands, Naval Oil Reserves and private

Habitat: Sparsely vegetated desert shrub and pinyon-juniper communities on shaley talus knolls at 4,600-6,700 feet elevation, late May-mid June.

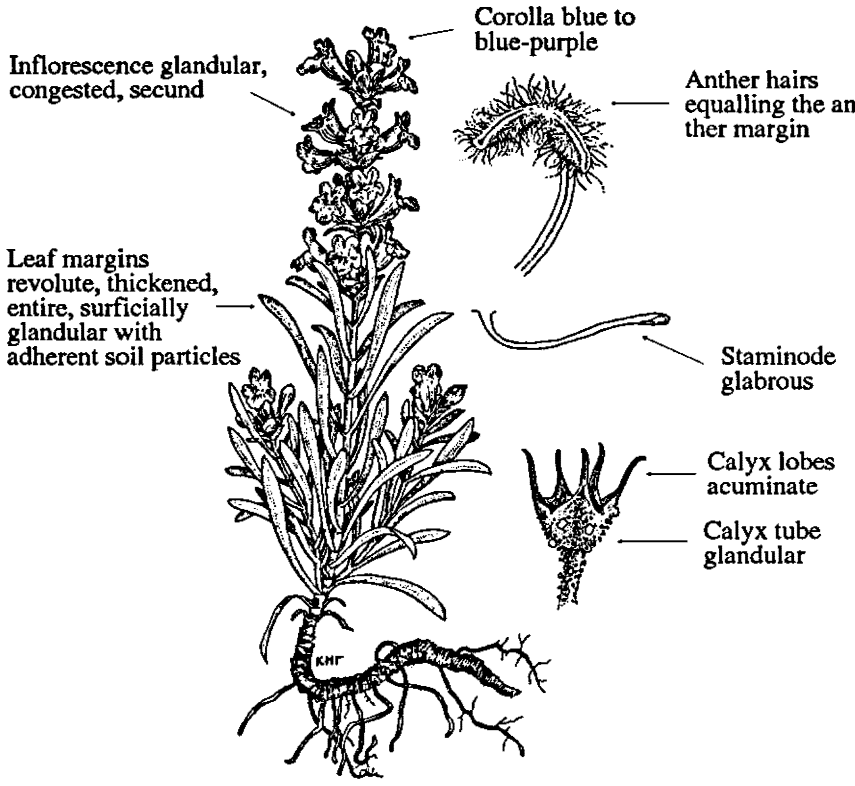
Look-alikes: Distinct from all Uintah Basin species by the deep lavender, large corollas (30-37 mm long), with dark violet lines in the throat and exserted, golden yellow bearded stamen.

Closeup of Penstemon grahamii by D. Atwood



Habitat of Penstemon grahamii by L. England

Species Distribution


Corolla blue to blue-purple
Inflorescence glandular, congested, secund
Anther hairs equalling the anther margin
Leaf margins revolute, thickened, entire, surficially glandular with adherent soil particles
Staminode glabrous
Calyx lobes acuminate
Calyx tube glandular

PENSTEMON IDAHOENSIS

Scientific Name: *Penstemon idahoensis* Atwood & Welsh

Common Name: Idaho penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

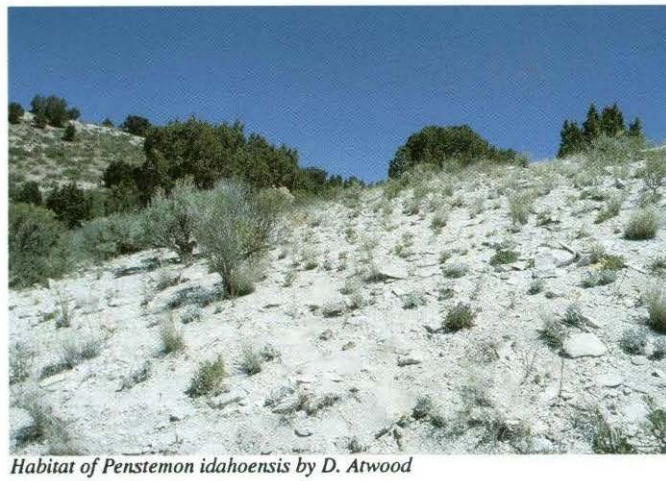
Synonyms: None

Global Distribution: Box Elder County, Utah and Cassia County Idaho

Management Responsibility: BLM-Salt Lake and Burley Districts, Sawtooth NF, and private

Habitat: Tuffaceous outcrops of the Tertiary Salt Lake Formation between 5,350 and 5,700 feet elevation. Grows with Utah juniper, bitterbrush, and bluebunch wheat grass, late June-July.

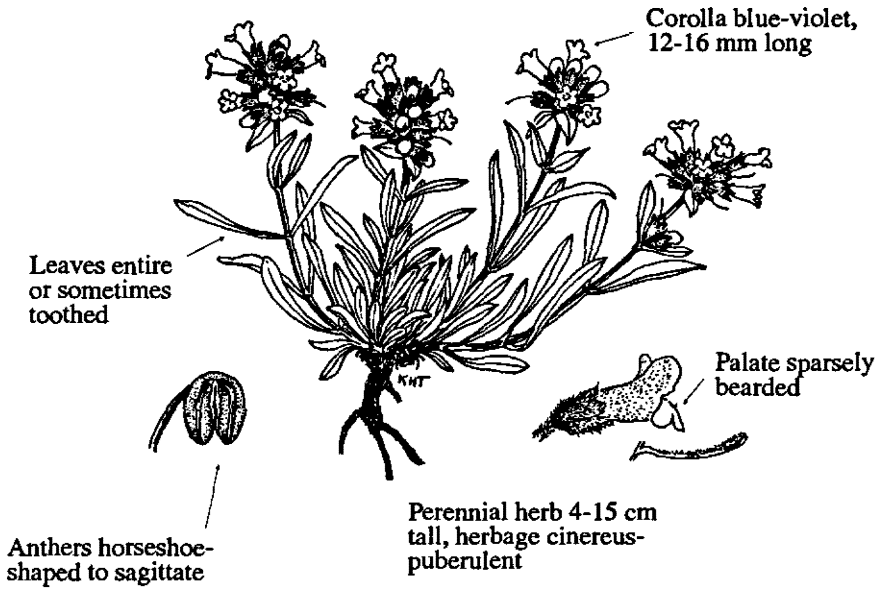
Look-alikes: Similar to *Penstemon scariosus*, but differing in being glandulular throughout and covered with adhering sand grains, having staminodia glabrous, and in having thickened leaf margins.



Habitat of Penstemon idahoensis by D. Atwood

Closeup of Penstemon idahoensis by D. Atwood

Species
Distribution


Corolla blue-violet, 12-16 mm long
Leaves entire or sometimes toothed
Palate sparsely bearded
Anthers horseshoe-shaped to sagittate
Perennial herb 4-15 cm tall, herbage cinereus-puberulent

PENSTEMON NANUS

Scientific Name: *Penstemon nanus* Keck

Common Name: Low beardtongue or Dwarf penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Endemic in Utah to Beaver and Millard counties

Agency Distribution: Desert Range Experiment Station, BLM-Cedar City and Richfield Districts and State Trust Lands

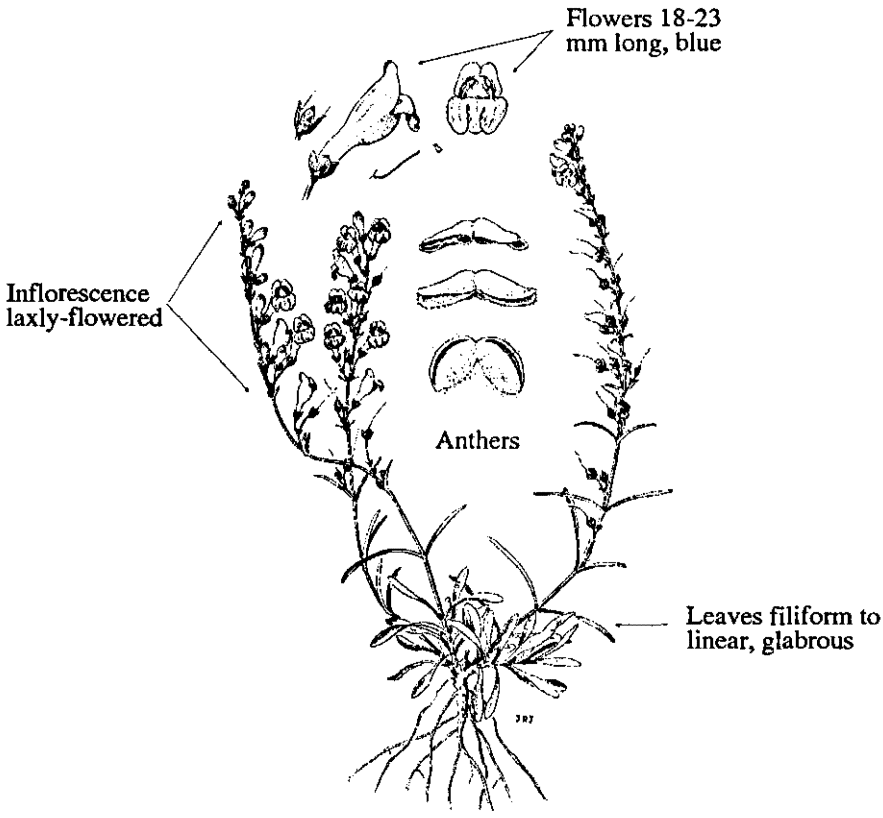
Habitat: Mixed desert shrub, shadscale, sagebrush, and pinyon-juniper communities on calcareous or dolomitic gravels between 5,180 to 7,020 feet elevation, May-June.

Look-alikes: Related to *P. humilus*, but distinct from it in having white anther sacs, and a densely orange-bearded staminode.

Closeup of Penstemon nanus by D. Atwood

Habitat of Penstemon nanus by D. Atwood

Species
Distribution



PENSTEMON NAVAJOA

Scientific Name: *Penstemon navajoa* N. Holm.

Common Name: Navajo Mountain penstemon

Family (Common Name): Scrophulariaceae (Figwort Family))

Synonyms: None

Global Distribution: Endemic to Navajo Mountain, San Juan County, Utah

Management Responsibility: Navajo Nation TL-Navajoa Mountain Chapter

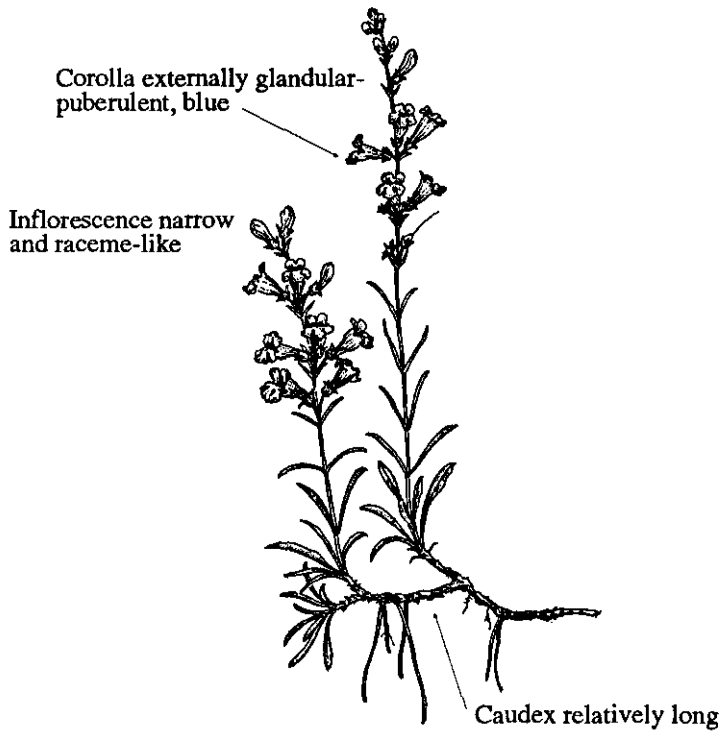
Habitat: Upper portion of the mountain on rocky, open places in ponderosa pine, aspen, Douglas-fir communities at 8,200 to 10,370 feet elevation, July-early August.

Look-alikes: A distinct species easily recognized by the villous staminodes, flexuous anther hairs, filiform to linear, glabrous leaves, and laxly-flowered inflorescence.

Closeup of Penstemon navajoa by D. House

Habitat of Penstemon navajoa by D. House

Species Distribution



PENSTEMON PARVUS

Scientific Name: *Penstemon parvus* Pennell

Common Name: Little penstemon or Aquarius Plateau penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Endemic to Utah in Garfield, Piute, Sevier, and Wayne? counties

Management Responsibility: Dixie and Fishlake NF's and State Trust Lands

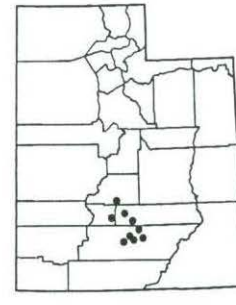
Habitat: Sagebrush-grass, and spruce communities on Tertiary volcanic gravels between 8,200 to 10,170 feet elevation, late June-August.

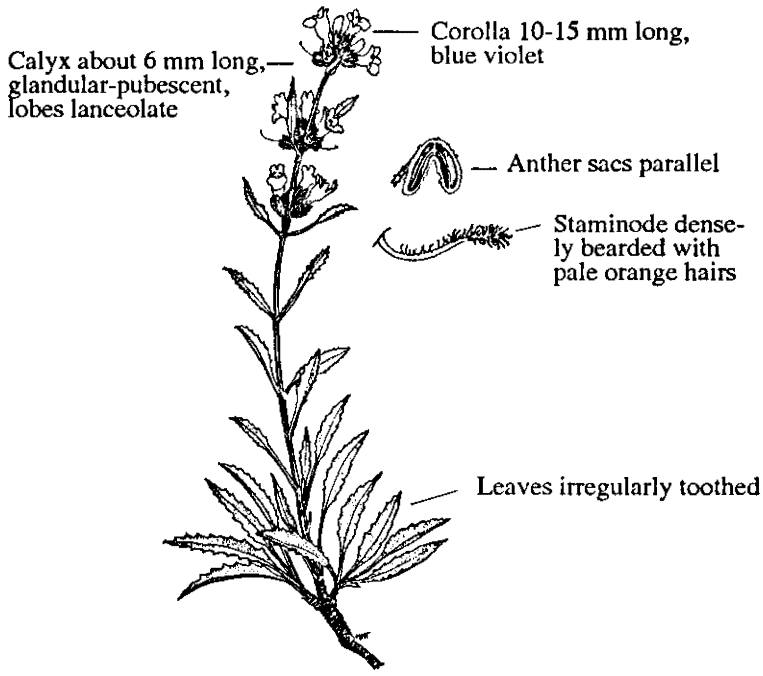
Look-alikes: A distinct species with a secund inflorescence, anthers dehiscing nearly or quite to the connective but the valves hardly parting, the sacs over 1 mm long, longer than broad.

Habitat of Penstemon parvus by D. Atwood

Closeup of Penstemon parvus by D. Atwood

Species
Distribution




Corolla 10-15 mm long, blue violet
Calyx about 6 mm long, glandular-pubescent, lobes lanceolate
Anther sacs parallel
Staminode densely bearded with pale orange hairs
Leaves irregularly toothed

PENSTEMON PINORUM

Scientific Name: *Penstemon pinorum* L. Shultz and J. Shultz

Common Name: Pinyon penstemon or Pine Valley Mountain penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

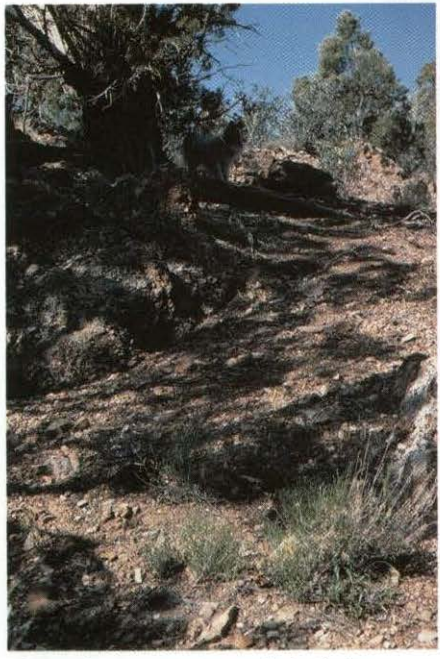
Global Distribution: Endemic to the Pine Valley Mountains, Iron county, Utah

Management Responsibility: Dixie NF, BLM-Cedar City District, State, and private

Habitat: Pinyon-juniper community between 5,600 to 5,800 feet elevation, May-June.

Look-alikes: Distinct in having blue violet corollas 10-15 mm long, glandular pubescent calyx about 6 mm long with lanceolate lobes, irregularly toothed leaves, and a densely bearded staminode with pale orange hairs.

Closeup of Penstemon pinorum by B. Franklin



Habitat of Penstemon pinorum by L. Shultz

Species Distribution

PENSTEMON SCARIOSUS VAR. ALBIFLUVIS

Scientific Name: *Penstemon scarious* var. *albifluvis* (England) N. Holmgren

Common Name: White River penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: *Pensemon albifluvis* England

Global Distribution: Uintah County, Utah

Management Responsibility: BLM-Vernal District

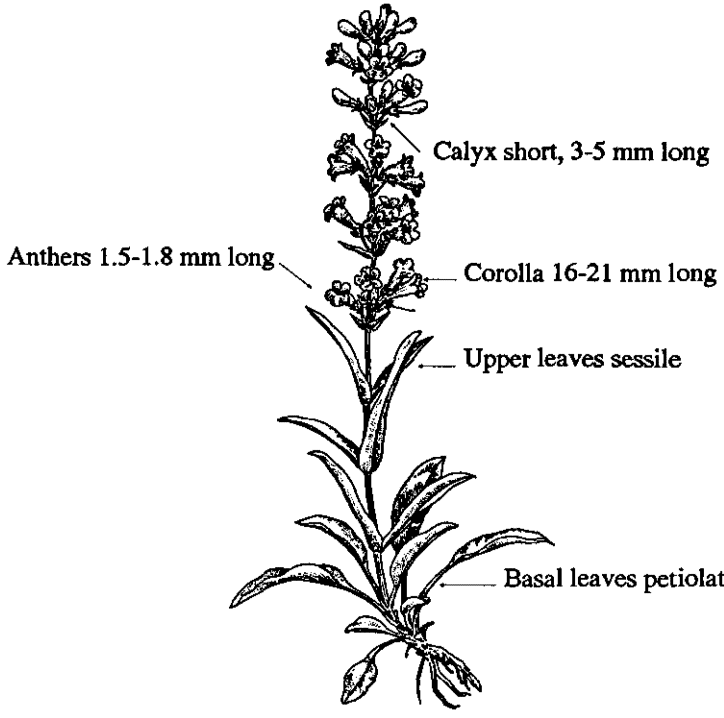
Habitat: Mixed desert shrub and pinyon-juniper communities, on sparsely vegetated shale slopes of the Green River Formation at 5,000-6,000 feet elevation, late May-June.

Look-alikes: Similar to other varieties of *P. scariosus*, but different from these in the lavender to pale blue corolla limbs, basal leaves not persistent through anthesis, and the 1.8-2.1 mm long anther cells.

Habitat of Penstemon scariosus var. albifluvis by L. England

Closeup of Penstemon scariosus var. albifluvis by L. Shultz

Species Distribution



PENSTEMON TIDESTROMII

Scientific Name: *Penstemon tidestromii* Pennell

Common Name: Tidestrom beardtongue

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: *Penstemon leptanthus* Pennell

Global Distribution: Endemic to Central Utah in Juab, Sanpete, and Utah counties

Management Responsibility: Manti-LaSal and Uinta (administered by Manti-LaSal) NF's, BLM-Richfield District, State Trust Lands? and private

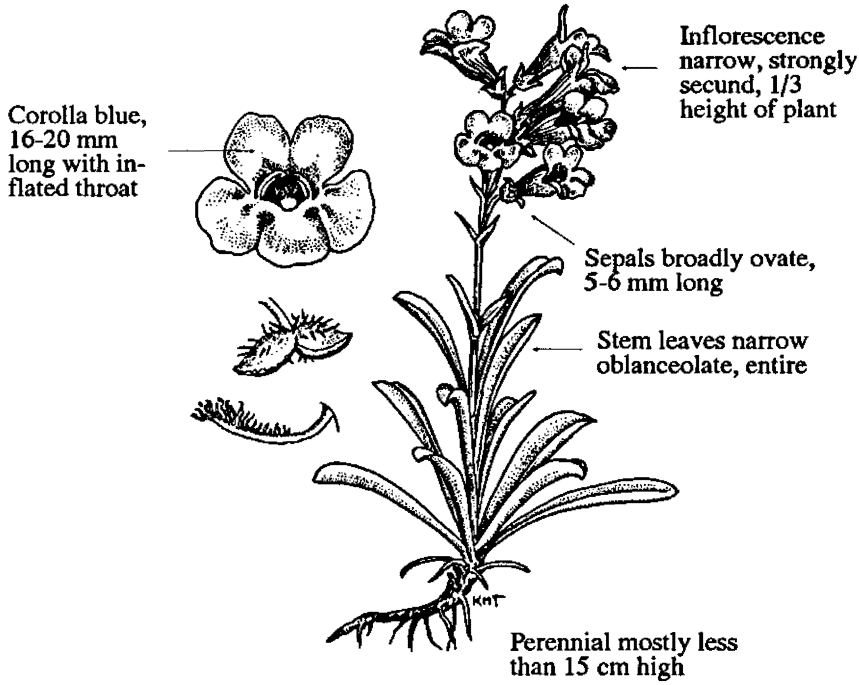
Habitat: Desert shrub, sagebrush, and pinyon-juniper communities on a variety of substrates between 5,350 to 8,200 feet elevation, May-June.

Look-alikes: Distinct from other species in having anthers 1.5-1.8 mm long, the calyx 3-5 mm long, and corollas 16-21 mm long.

Habitat of Penstemon tidestromii by D. Atwood

Closeup of Penstemon tidestromii by D. Atwood

Species
Distribution


Corolla blue, 16-20 mm long with inflated throat
Inflorescence narrow, strongly secund, 1/3 height of plant
Sepals broadly ovate, 5-6 mm long
Stem leaves narrow oblanceolate, entire
Perennial mostly less than 15 cm high

PENSTEMON UINTAHENSIS

Scientific Name: *Penstemon uintahensis* Pennell

Common Name: Uinta beardtongue

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: None

Global Distribution: Endemic to the Uinta Mountains in Daggett, Duchesne, Summit, and Uintah counties

Management Responsibility: Ashley and Wasatch-Cache NF's

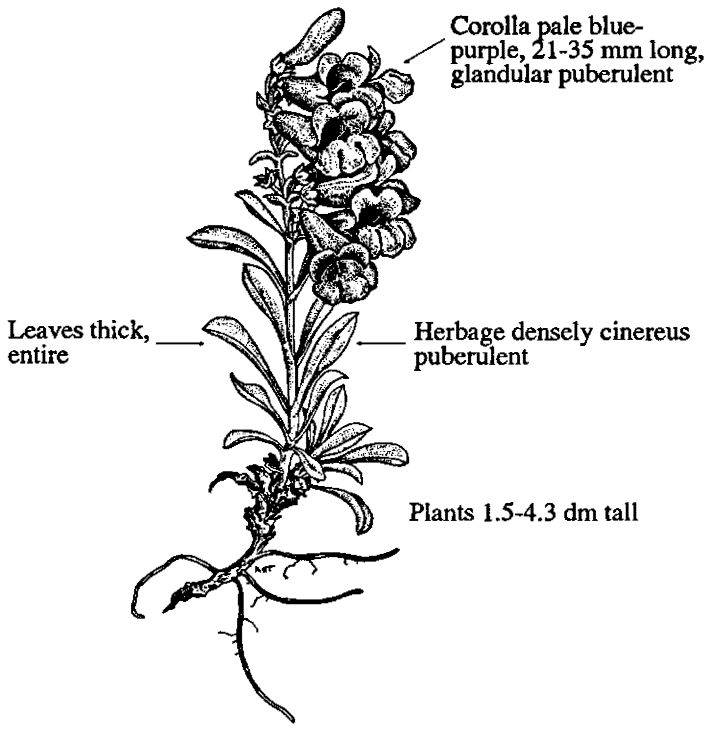
Habitat: Alpine tundra and spruce-fir communities on siliceous gravels and humus between 9,940 to 12,520 feet elevation, July-August.

Look-alikes: Related to *P. subglaber* (a more southern species), but different in the smaller flowers (16-20 mm long), the tube 4-5 mm long, smaller stature (0.5-1.5 dm tall), and the anther cells 0.8-1.2 mm long.

Closeup of Penstemon uintahensis by B. Franklin

Habitat of Penstemon uintahensis by B. Franklin

Species Distribution


Corolla pale blue-purple, 21-35 mm long, glandular puberulent
Leaves thick, entire
Herbage densely cinereus puberulent
Plants 1.5-4.3 dm tall

PENSTEMON WARDII

Scientific Name: *Penstemon wardii* Gray

Common Name: Ward beardtongue

Family (Common Name): Scrophulariaceae (Figwort Family)

Synonyms: *Penstemon glaber* var. *wardii* (Gray) Jones

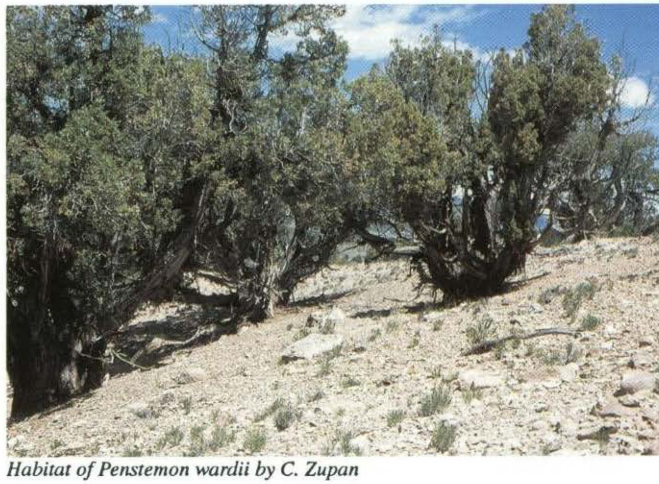
Global Distribution: Endemic to Sanpete, Millard and Sevier counties, Utah

Management Responsibility: Fishlake NF, BLM-Richfield District, and private

Habitat: Desert shrub, pinyon-juniper, sagebrush, shadescale, and greasewood communities on the Bald Knoll and Arapien Shale formations between 5,495 to 6,810 feet elevation, May-July.

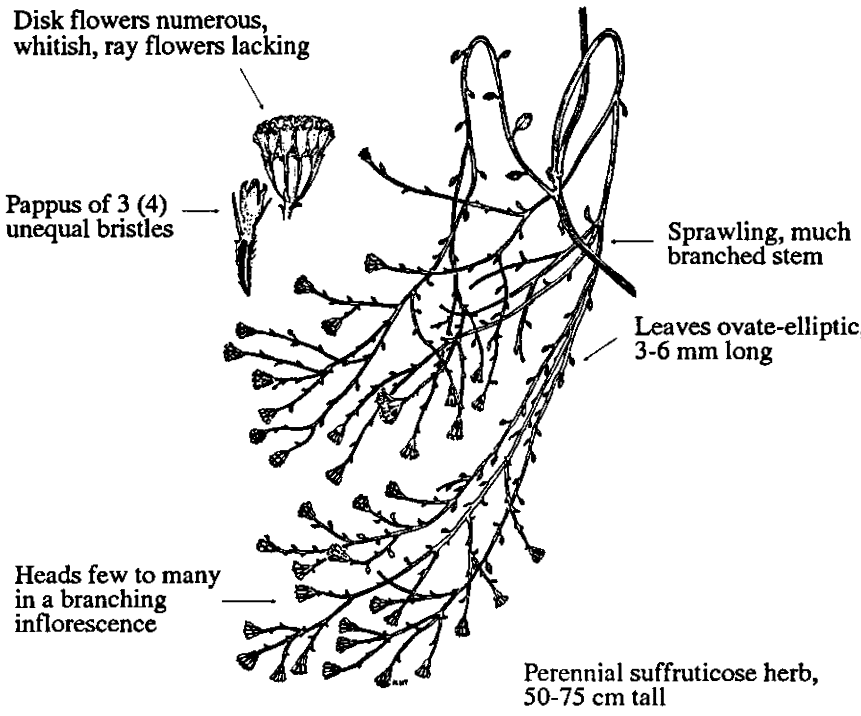
Look-alikes: A distinct species with large flowers (24-35 mm long) for its size (1.5-3 dm tall), glandular-puberulent corollas, and densely cinereous- puberulent leaves.

Closeup of Penstemon wardii by C. Zupan



Habitat of Penstemon wardii by C. Zupan

Species Distribution


Disk flowers numerous, whitish, ray flowers lacking
Pappus of 3 (4) unequal bristles
Sprawling, much branched stem
Leaves ovate-elliptic, 3-6 mm long
Heads few to many in a branching inflorescence
Perennial suffruticose herb, 50-75 cm tall

PERITYLE SPECUICOLA

Scientific Name: *Perityle specuicola* Welsh & Neese

Common Name: Alcove rock daisy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to Grand and San Juan counties, Utah

Management Responsibility: Glen Canyon NRA, Arches and Canyonlands? NP's, and BLM-Moab District

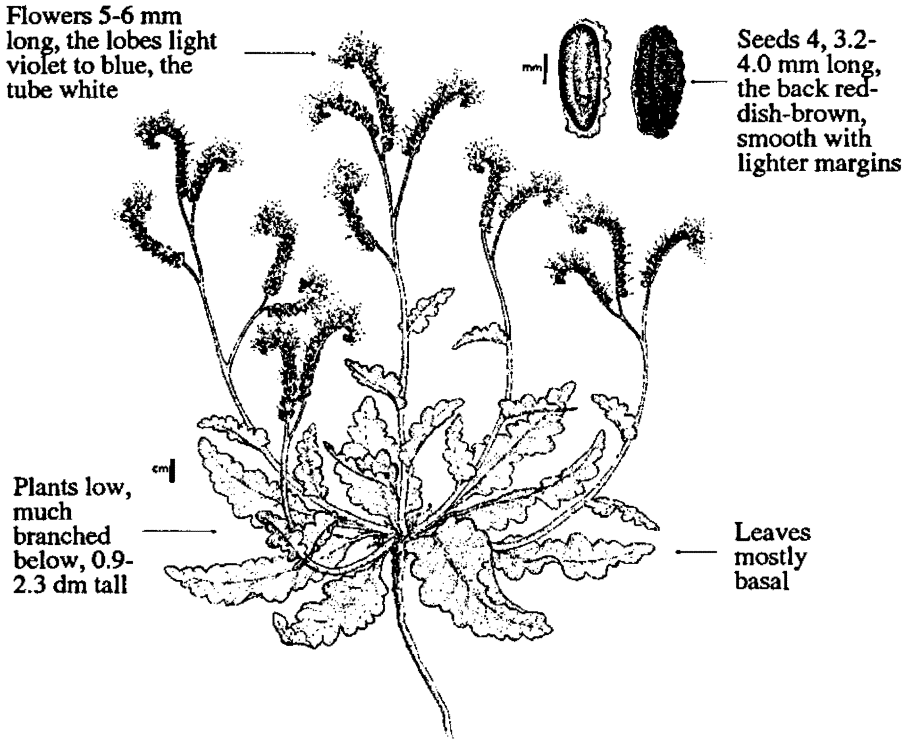
Habitat: Hanging garden communities at 3,690 to 4,000 feet elevation, mid-July-late September.

Look-alikes: Similar to *P. tenella*, but more robust in size (50-75 cm high vs 9-25 cm), the herbage hispidulous, and with 3 (4) unequal bristles.

Closeup of Perityle specuicola by B. Franklin

Habitat of Perityle specuicola by B. Franklin

Species
Distribution


Flowers 5-6 mm long, the lobes light violet to blue, the tube white
mm
Seeds 4, 3.2-4.0 mm long, the back reddish-brown, smooth with lighter margins
cm
Plants low, much branched below, 0.9-2.3 dm tall
Leaves mostly basal

PHACELIA HOWELLIANA

Scientific Name: *Phacelia howelliana* Atwood

Common Name: Howell scorpion weed

Family (Common Name): Hydrophyllaceae (Waterleaf Family)

Synonyms: None

Global Distribution: Endemic to Utah in Grand, San Juan, Wayne, and Kane counties

Management Responsibility: Navajoa Nation TL-Oljato, Navajoa Mountain?, Kayenta?, and Shonto? Chapters; BLM-Moab District, Arches and Canyonlands NP's, and Glen Canyon NRA

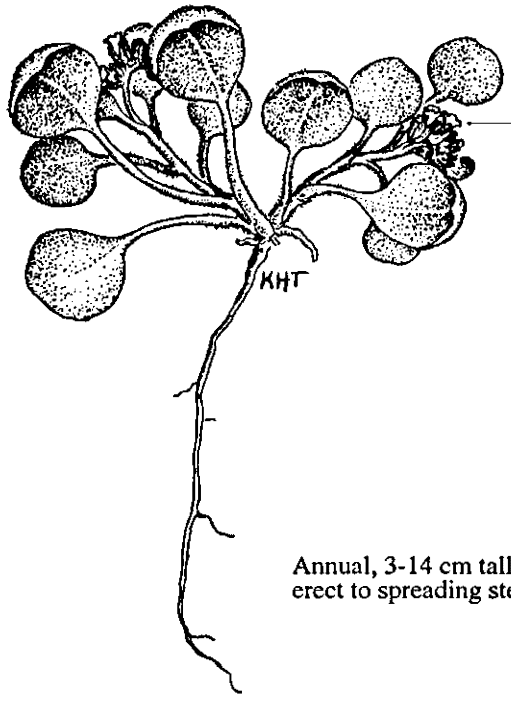
Habitat: Restricted to clay and basalt hills, salt desert and blackbrush shrub communities at 4,500 to 5,000 feet elevation, April-June.

Look-alikes: Similar to *P. crenulata* and *P. splendens*. Differing from the former by the distinctly bicolored corollas and from the latter by the basally branched stems, strigose and glandular (vs glabrous), white corolla tube (vs yellowish), and seed morphology.

Closeup of Phacelia howelliana by D. Atwood

Habitat of Phacelia howelliana by D. Atwood

Species
Distribution


Corollas 3.0-4.5 mm long, pale blue, pubescent, the tube pale yellow streaked with blue; staminal filiments glabrous
KHT
Annual, 3-14 cm tall with erect to spreading stems

PHACELIA INDECORA

Scientific Name: *Phacelia indeora* J.T. Howell

Common Name: Bluff phacelia

Family (Common Name): Hydrophyllaceae (Waterleaf Family)

Synonyms: None

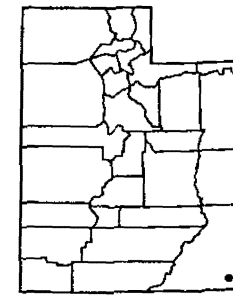
Global Distribution: San Juan (type from Bluff) County, Utah; endemic

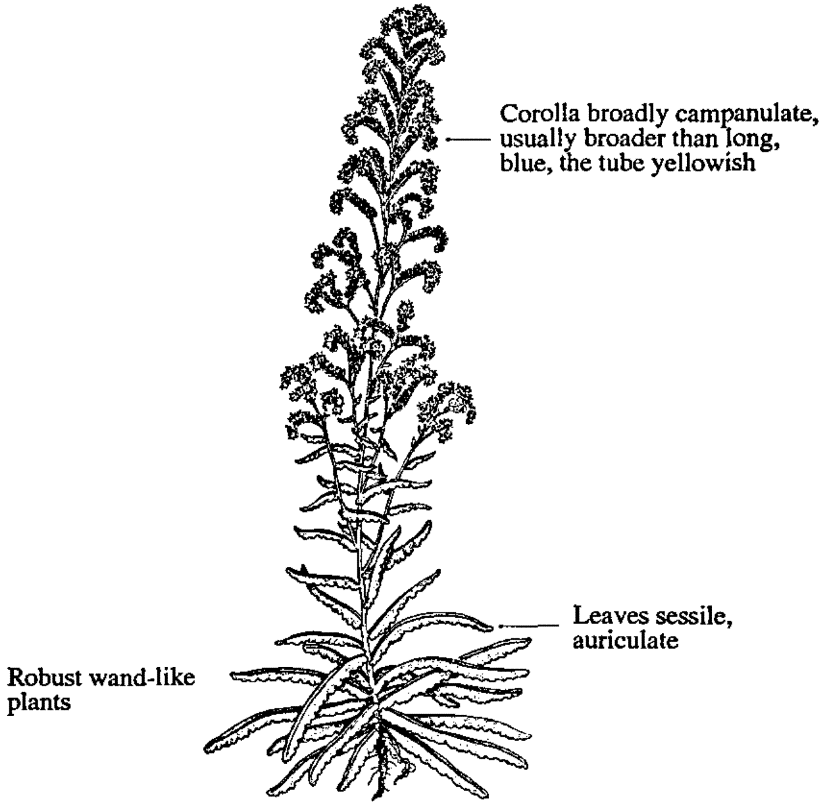
Management Responsibility: BLM-Moab District?, private (?)

Habitat: Salt desert shrub community at about 4,490 feet elevation, May.

Look-alikes: *P. indecora* is similar to *P. incana*, but the stems are finely glandular-puberulent vs glandular-villous with spreading hairs, the corolla is pale blue vs white to pale lavender in *P. incana*.

Species
Distribution




Corolla broadly campanulate, usually broader than long, blue, the tube yellowish
Leaves sessile, auriculate
Robust wand-like plants

PHACELIA UTAHENSIS

Scientific Name: *Phacelia utahensis* Voss

Common Name: Utah phacelia

Family (Common Name): Hydrophyllaceae (Waterleaf Family)

Synonyms: None

Global Distribution: Known from Sanpete (type Locality) and Sevier counties, Utah, and probably on the Mancos Shale Formation in Carbon County; endemic

Management Responsibility: BLM-Richfield and Moab Districts

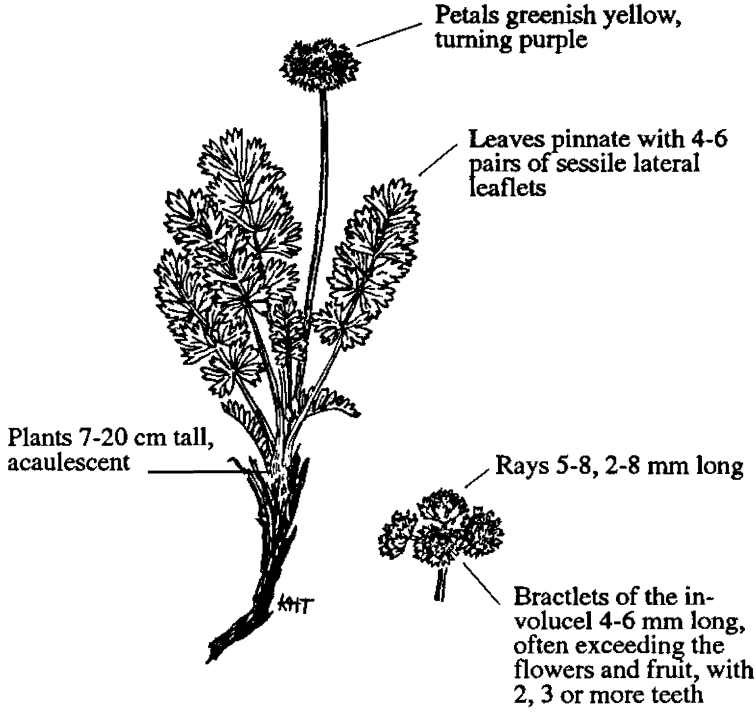
Habitat: Salt desert shrub community on the Arpapien Shale Formation at 5,500 to 5,700 feet elevation, April-June.

Look-alikes: The combination of sessile, auriculate cauline leaves and robust wandlike plants are distinctive for this narrowly restricted plant of central Utah.

Habitat of Phacelia utahensis by D. Atwood

Closeup of Phacelia utahensis by D. Atwood

Species
Distribution


Petals greenish yellow, turning purple
Leaves pinnate with 4-6 pairs of sessile lateral leaflets
Plants 7-20 cm tall, acaulescent
Rays 5-8, 2-8 mm long
Bractlets of the involucel 4-6 mm long, often exceeding the flowers and fruit, with 2, 3 or more teeth

PODISTERA EASTWOODIAE

Scientific Name: *Podistera eastwoodiae* (Coult. & Rose) Math. & Const.

Common Name: Eastwoos podistera

Family (Common Name): Apiaceae or Umbelliferae (Parsley Family)

Synonyms: *Ligusticum eastwoodiae* Coult. & Rose

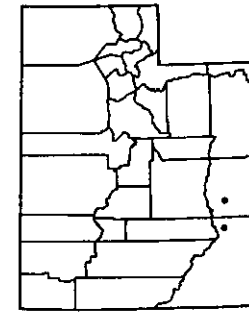
Global Distribution: Grand and San Juan counties, Utah; Colorado, New Mexico

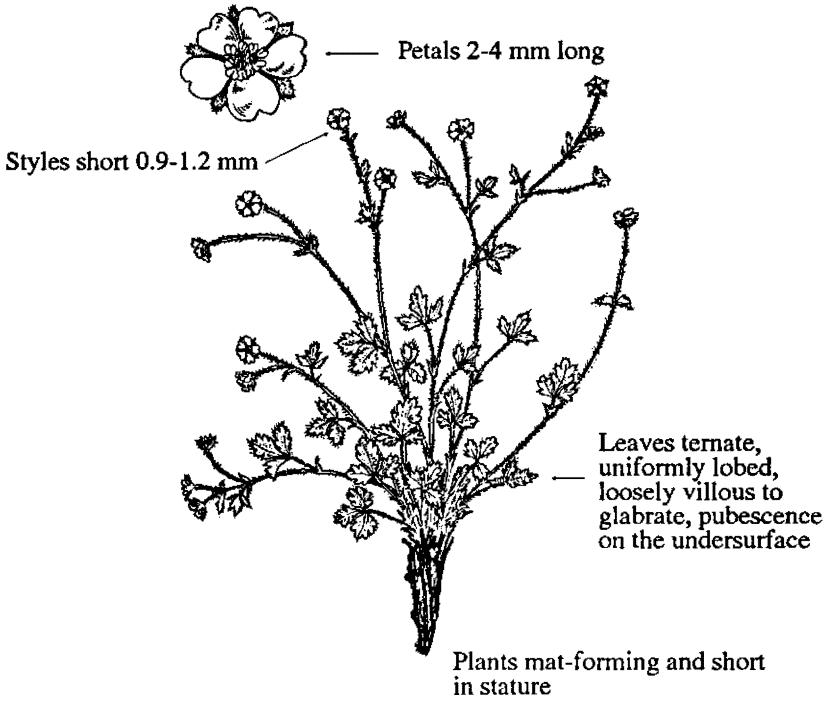
Management Responsibility: Manti-LaSal NF

Habitat: Toe slopes of rock slides between 9,500 to 10,000 feet elevation, July-August.

Look-alikes: Similar to other acaulescent genera (*Oreoxis, Aletes*), but different in having a conic stylopodium, once compound leaves with palmatifid leaflets, and bractlets of the involucels with 2 or 3 or more teeth.

Species
Distribution




Petals 2-4 mm long
Styles short 0.9-1.2 mm
Leaves ternate, uniformly lobed, loosely villous to glabrate, pubescence on the undersurface
Plants mat-forming and short in stature

POTENTILLA COTTAMII

Scientific Name: *Potentilla cottamii* N. Holmgren

Common Name: Cottam cinquefoil

Family (Common Name): Rosaceae (Rose Family)

Synonyms: None

Global Distribution: Pilot Range and Raft River Mountains of western Box Elder County, Utah and adjacent Elk County, Nevada

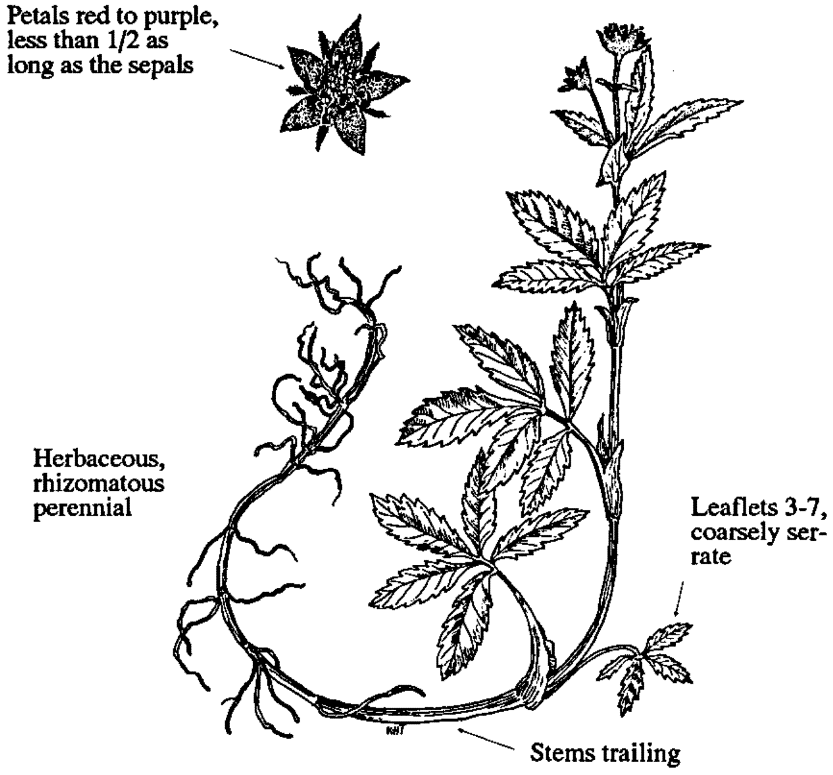
Management Responsibility: Sawtooth NF, BLM-Salt Lake District

Habitat: Cracks and crevices of quartzite outcrops, often shaded from direct midday sunlight, 7,500-10,400 feet elevation, late June-early August.

Look-alikes: Closely related to *P. nivea,* but readily distinguished by the leaf undersurface having a loosely villous to glabrate pubescence.

Habitat of Potentilla cottamii by D. Atwood

Species Distribution


Petals red to purple, less than 1/2 as long as the sepals
Herbaceous, rhizomatous perennial
Leaflets 3-7, coarsely serrate
Stems trailing

POTENTILLA PALUSTRIS

Scientific Name: *Potentilla palustris* (L.) Scop.

Common Name: Marsh cinquefoil or Bog potentilla

Family (Common Name): Rosaceae (Rose Family)

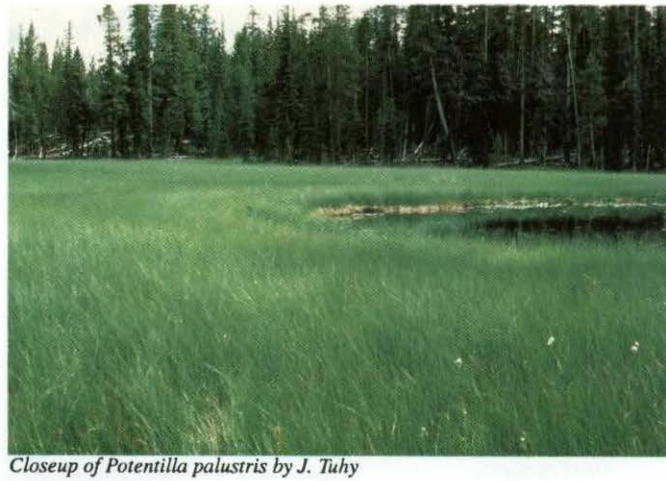
Synonyms: *Comarum palustre* L.

Global Distribution: Known in Utah from the Uinta Mountains, Uintah County; Circumboreal, Alaska and Yukon east to Labrador south to California, and Wyoming

Management Responsibility: Ashley NF

Habitat: Wet meadows and bogs between 9,400 to 9,615 feet elevation, July-August.

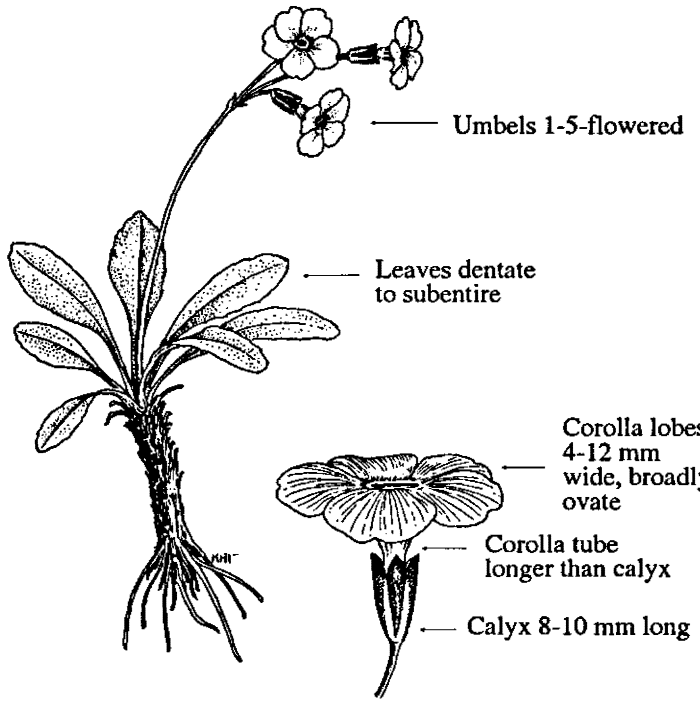
Look-alikes: Distinct from all other Utah species by the reddish purple to dark red or maroon petals which are less than half as long as the sepals, 3-7 coarsely serrate leaflets, and trailing stems.



Closeup of Potentilla palustris by J. Tuhy

Habitat of Potentilla palustris by J. Tuhy

Species
Distribution


Umbels 1-5-flowered
Leaves dentate to subentire
Corolla lobes 4-12 mm wide, broadly ovate
Corolla tube longer than calyx
Calyx 8-10 mm long

PRIMULA DOMENSIS

Scientific Name: *Primula domensis* Kass & Welsh

Common Name: House Range primrose

Family (Common Name): Primulaceae (Primrose Family)

Synonyms: None

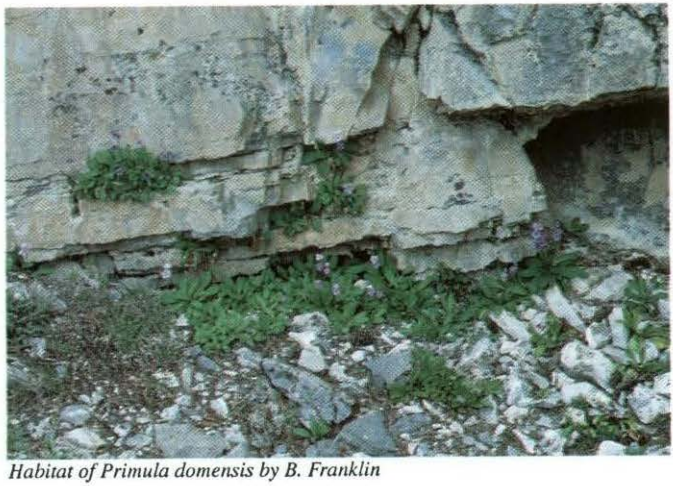
Global Distribution: Millard County, Utah; a Great Basin endemic

Management Responsibility: BLM-Richfield District

Habitat: Crevices in limestone at 8,500 to 9,000 feet elevation in the House Range (type locality), May-June.

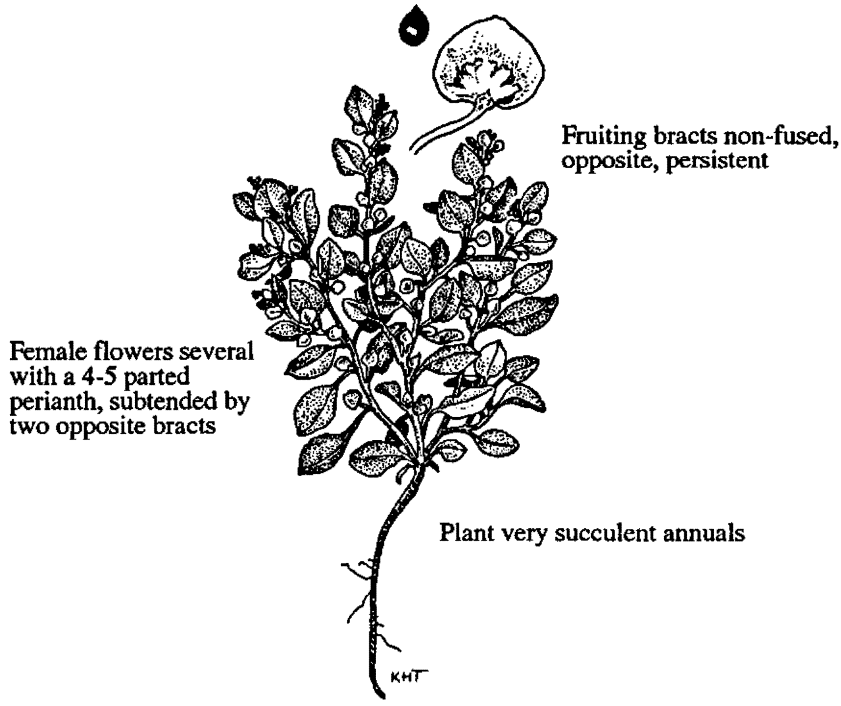
Look-alikes: This Primrose is nearer geographically to the *P. nevadensis* of eastern Nevada than it is to *P. maguirei*. In *P. nevadensis* the cuneate, markedly dentate leaves commonly overtopping the inflorescence are diagnostic. Although grossly similar to *P. maguirei*, the House Range primrose has much larger calyces, on the average and in the extreme, more consistently toothed leaves, and corolla tubes shorter in proportion to the calyx length.

Closeup of Primula domensis by B. Franklin



Habitat of Primula domensis by B. Franklin

Species
Distribution


Fruiting bracts non-fused, opposite, persistent
Female flowers several with a 4-5 parted perianth, subtended by two opposite bracts
Plant very succulent annuals
KHT

PROATRIPLEX PLEIANTHA

Scientific Name: *Proatriplex pleiantha* (Weber) Stutz & Chu

Common Name: Four Corners Orach or Mancos saltbush

Family (Common Name): Chenopodiaceae

Synonyms: *Atriplex pleiantha* W.A. Weber

Global Distribution: Endemic to the Navajo Basin, San Juan County, Utah; southwestern Colorado and northwestern New Mexico

Management Responsibility: BLM-Moab District? and Navajo Nation TL-Aneth Chapter

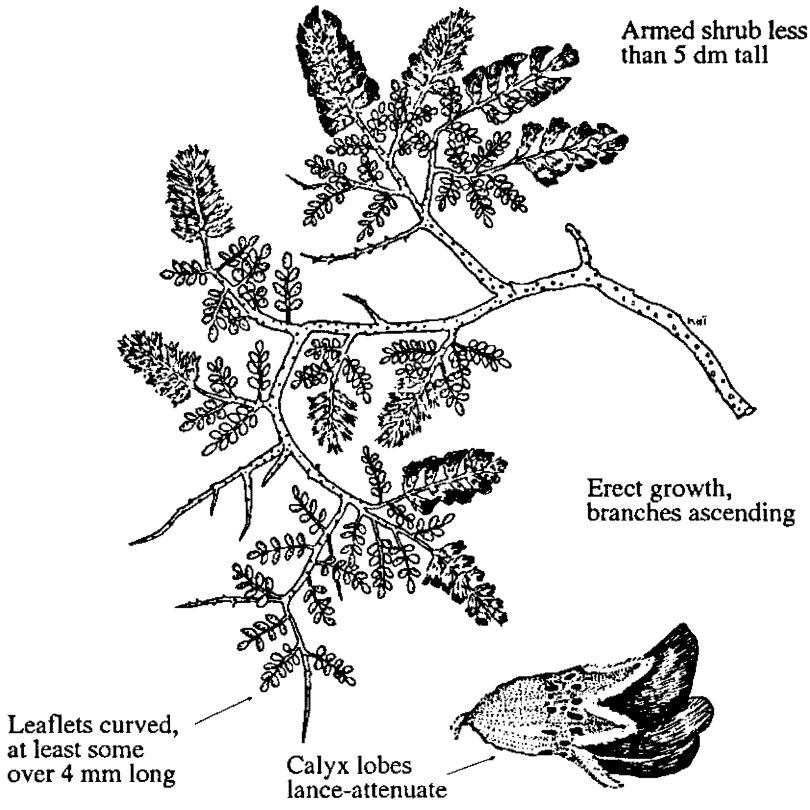
Habitat: Salt desert shrub community on the Morrison Formation at 4,750-4,900 feet elevation, May-June.

Look-alikes: Similar to *Atriplex graciliflora*, but easily distinguished by the multiple female flowers subtended between the nonfused fruiting bracts, female flower with a perianth and very succulent habit.

Closeup of Proatriplex pleiantha by D. House

Habitat of Proatriplex pleiantha by D. House

Species Distribution


Armed shrub less than 5 dm tall
Erect growth, branches ascending
Leaflets curved, at least some over 4 mm long
Calyx lobes lance-attenuate

PSOROTHAMNUS POLYDENIUS VAR. JONESII

Scientific Name: *Psorothamnus polydenius* (Torr.) Rydb. var. *jonesii* Barneby

Common Name: Jones indigo-bush or glandular indigo-bush

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

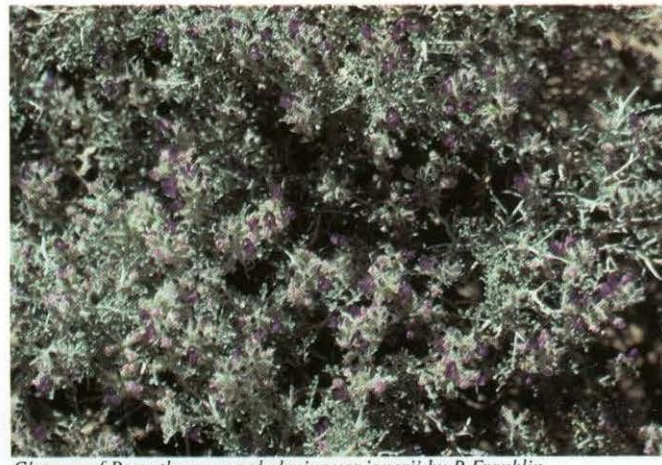
Synonyms: *Dalea nummularia* Jones

Global Distribution: Endemic to Emery and Wayne counties, Utah

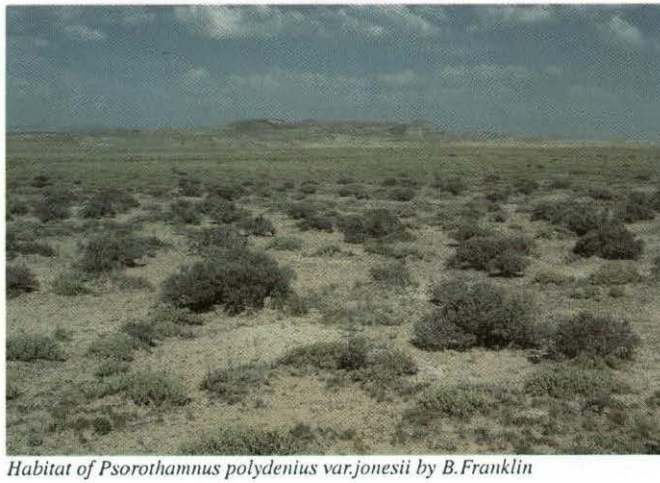
Management Responsibility: BLM-Moab and Richfield Districts

Habitat: Salt desert shrub community on Mancos Shale Formation (Blue Gate and Tununk members) and less commonly elsewhere at approximately 4,820 feet elevation, late May-mid-July.

Look-alikes: Similar to the typical variety, but differs in its erect growth form and longer leaflets..

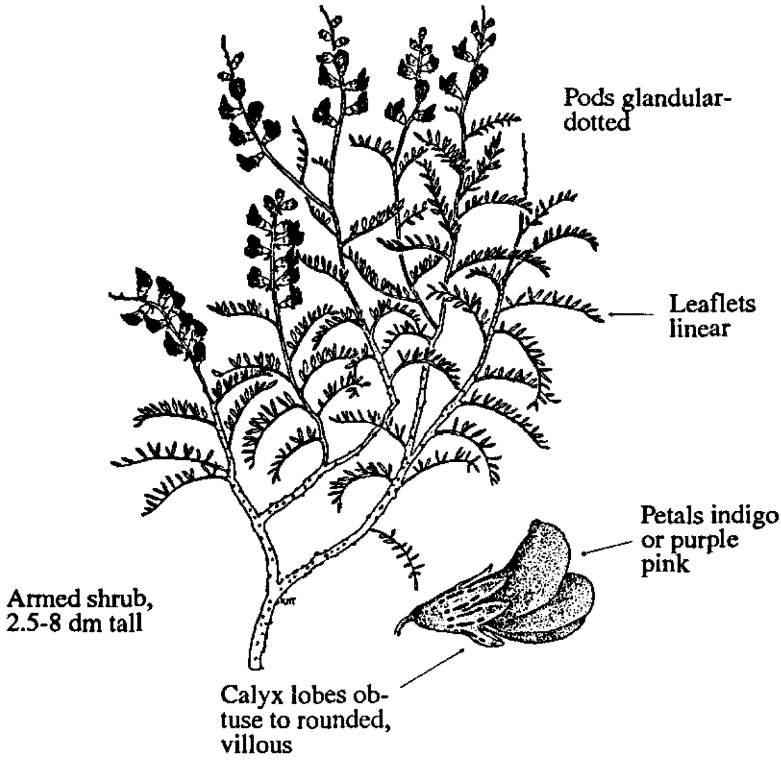


Closeup of Psorothamnus polydenius var.jonesii by B.Franklin



Habitat of Psorothamnus polydenius var.jonesii by B.Franklin

Species
Distribution


Pods glandular-dotted
Leaflets linear
Petals indigo or purple pink
Armed shrub, 2.5-8 dm tall
Calyx lobes obtuse to rounded, villous

PSOROTHAMNUS THOMPSONIAE VAR. *WHITINGII*

Scientific Name: *Psorothamnus thompsoniae* (Vail) Welsh & Atwood var. *whitingii* (Kearney & Peebles) Barneby

Common Name: Thompson's indigobush

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: *Dalea whitingii* Kearney & Peebles

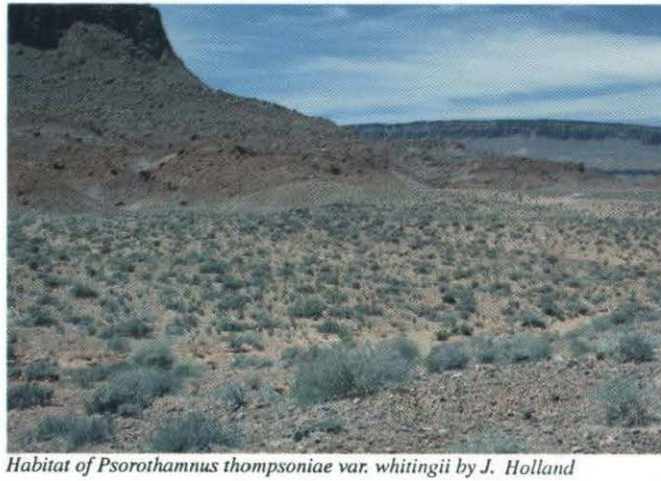
Global Distribution: Endemic to San Juan County, Utah and Coconino County, Arizona

Management Responsibility: Glen Canyon NRA and Navajo Nation TL-Oljeto, Navajo Mountain? and Shonto? Chapters

Habitat: In sandy soils, mixed desert shrub community at 3,700 to 5,020 fee elevation, late May-June.

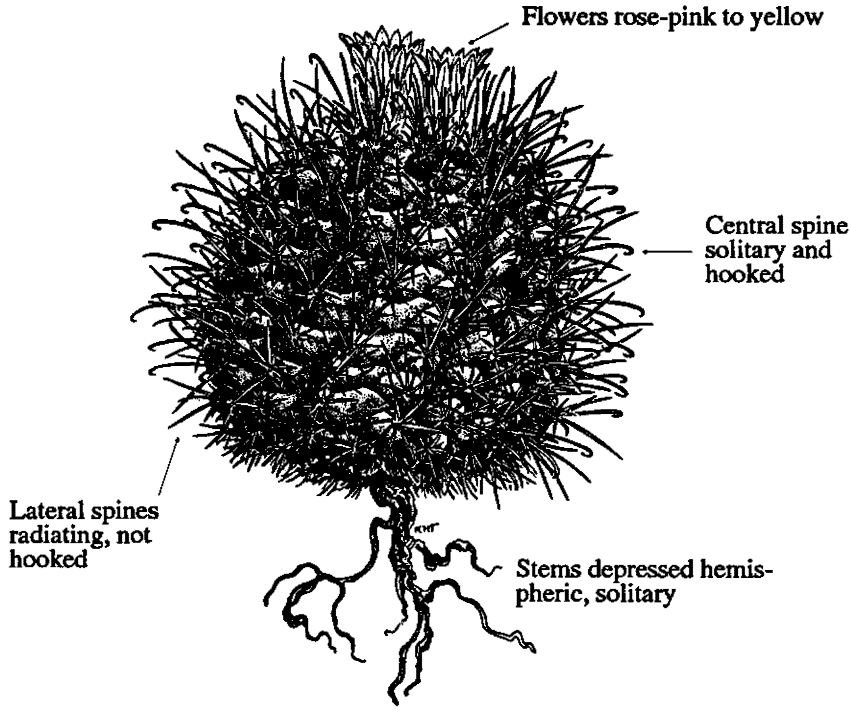
Look-alikes: Similar to the typical variety, but differs in the villous calyx tube and linear leaflets.

Closeup of Psorothamnus thompsoniae var. whitingii by J. Holland



Habitat of Psorothamnus thompsoniae var. whitingii by J. Holland

Species
Distribution


Flowers rose-pink to yellow
Central spine solitary and hooked
Lateral spines radiating, not hooked
Stems depressed hemispheric, solitary

SCLEROCACTUS PUBISPINUS VAR. *PUBISPINUS*

Scientific Name: *Sclerocactus pubispinus* (Engelm.) L. Benson var. *pubispinus*

Common Name: Great Basin fishhook cactus

Family (Common Name): Cactaceae (Cactus Family)

Synonyms: *Echinocactus pubispinus* Engelm.

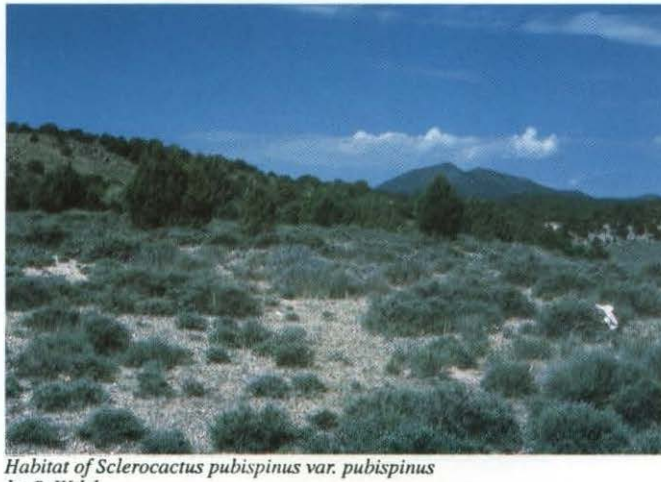
Global Distribution: Beaver, Box Elder, Iron, Juab, Millard, Tooele and Sevier counties, Utah; Nevada

Management Responsibility: Desert Range Experiment Station, Fishlake NF?, BLM-Cedar City, Salt Lake and Richfield Districts, State Trust Lands and private

Habitat: Shadscale, sagebrush, winterfat, rabbitbrush, and pinyon-juniper communities on calcareous and dolomite gravels and outcrops between 5,400 to 6,800 feet elevation, April-June.

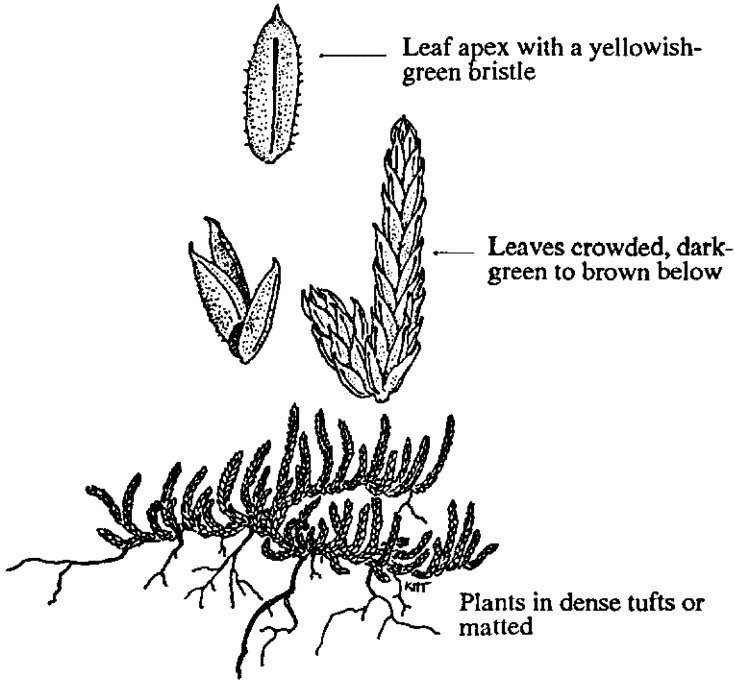
Look-alikes: Related to *S. whipplei*, which occurs further east in Utah, but is recognized by its juvenile pubescent radial spines and 1-2 hooked central spines.

Closeup of Sclerocactus pubispinus var. pubispinus
by D. Atwood



Habitat of Sclerocactus pubispinus var. pubispinus
by S. Welsh

Species
Distribution



SELAGINELLA UTAHENSIS

Scientific Name: *Selaginella utahensis* Flowers

Common Name: Utah Spikemoss

Family (Common Name): Selaginellaceae (Spikemoss Family)

Synonyms: None

Global Distribution: Known from Washington County, Utah and Clark County, Nevada

Management Responsibility: Zion NP and BLM-Cedar City District

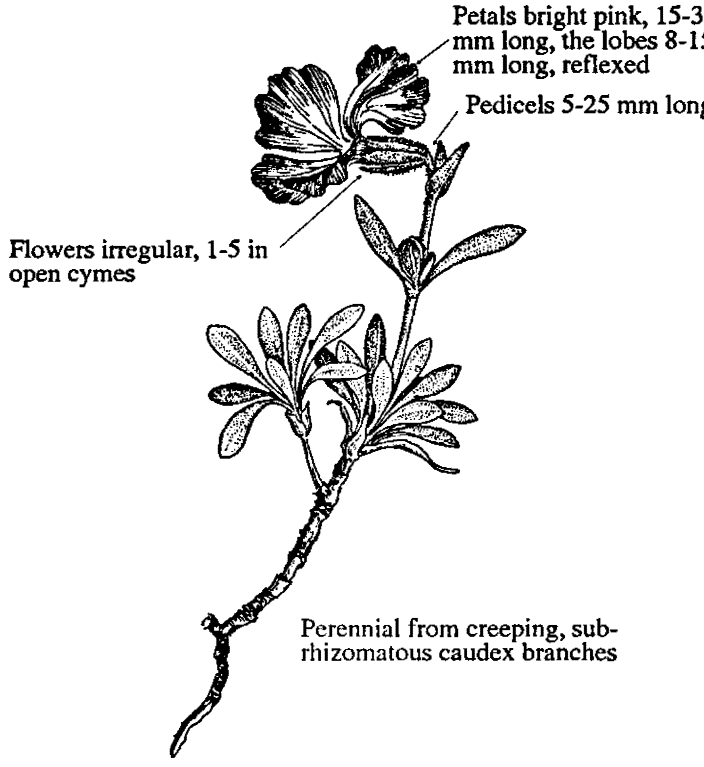
Habitat: Ledges and crevices in Navajo Sandstone in sagebrush, oakbrush, pinyon-juniper and ponderosa pine communities at 3,480 to 7,710 feet elevation.

Look-alikes: Similar to *S. watsonii,* but differing in the leaves which typically have a very short white point to 0.1 mm long or less, or occasionally with a septum, but this seldom over 0.2 mm long, or the point obsolete and the leaves blunt.

Closeup of Selaginella utahensis by S. Welsh

Habitat of Selaginella utahensis by S. Welsh

Species Distribution


Petals bright pink, 15-35 mm long, the lobes 8-15 mm long, reflexed
Pedicels 5-25 mm long
Flowers irregular, 1-5 in open cymes
Perennial from creeping, sub-rhizomatous caudex branches

SILENE PETERSONII

Scientific Name: *Silene petersonii* Maguire

Common Name: Maguire campion, Wasatch limestone catchfly or Peterson catchfly

Family (Common Name): Caryophyllaceae (Pink Family)

Synonyms: None

Global Distribution: Endemic to Utah in Iron, Sanpete, Garfield, and Sevier counties

Management Responsibility: Dixie and Manti-LaSal NF's, Bryce Canyon NP, Cedar Breaks NM and BLM-Cedar City District

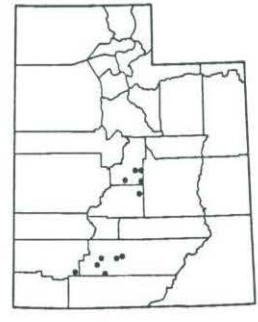
Habitat: Ponderosa pine, Rocky Mountain juniper, bristlecone pine, spruce-fir, and aspen-sagebrush communities on open calcareous and igneous gravels between 6,955 to 11,200 feet elevation, July-August.

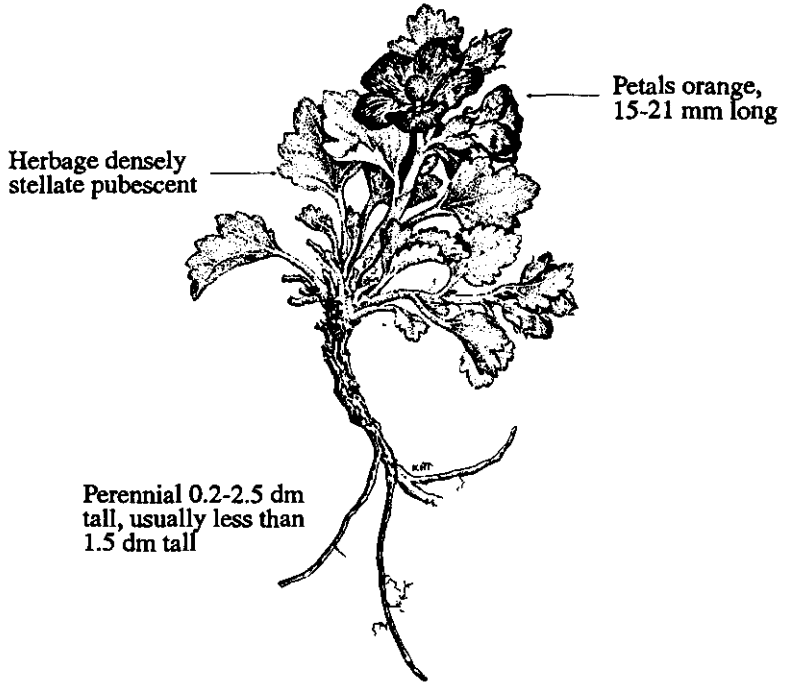
Look-alikes: Distinct from other Utah species by the soboliferous habit and large bright pink petal lobes (8-15 mm long).

Habitat of Silene petersonii by D. Atwood

Closeup of Silene petersonii by J. Tuhy

Species
Distribution





SPHAERALCEA CAESPITOSA

Scientific Name: *Sphaeralcea caespitosa* Jones

Common Name: Jones globemallow

Family (Common Name): Malvaceae (Mallow Family)

Synonyms: None

Global Distribution: Western Utah in Beaver and Millard counties; Nevada

Management Responsibility: Desert Range Experiment Station, BLM-Cedar City and Richfield Districts and State Trust Lands?

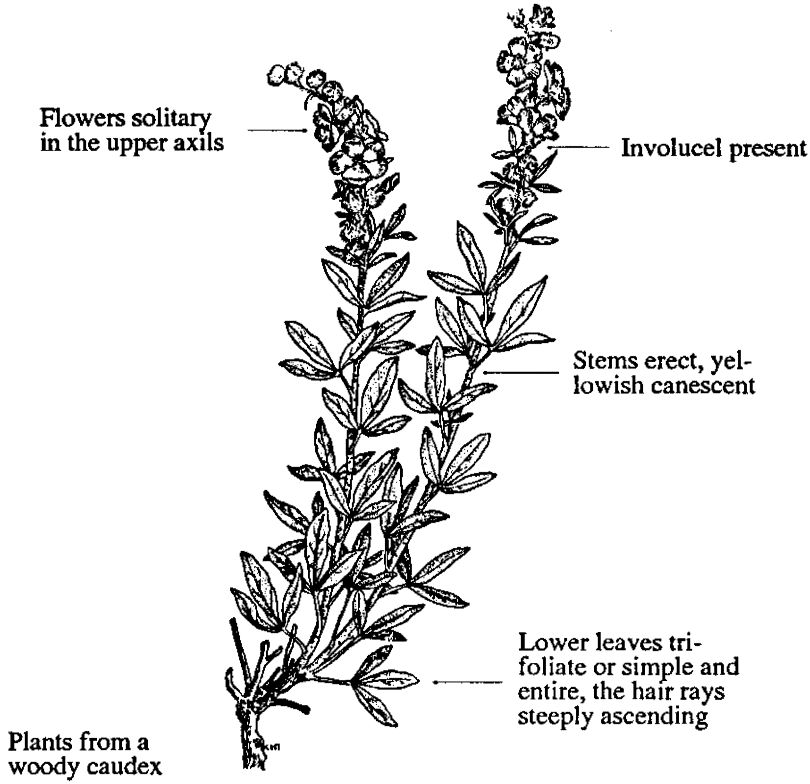
Habitat: Mixed desert shrub, pinyon-juniper, shadscale, and grassland mostly on the Sevy Dolomite Formation and on calcareous gravels between 4,490 to 6,415 feet elevation, May-June and again in September.

Look-alikes: Similar to *S. ambigua*, but differing by its racemose inflorescence and hairs radiating in more than a single plane.

Closeup of Sphaeralcea caespitosa by D. Atwood

Habitat of Sphaeralcea caespitosa by S. Welsh

Species
Distribution


Flowers solitary in the upper axils
Involucel present
Stems erect, yellowish canescent
Lower leaves trifoliate or simple and entire, the hair rays steeply ascending
Plants from a woody caudex

SPHAERALCEA PSORALOIDES

Scientific Name: *Sphaeralcea psoraloides* Welsh

Common Name: Psoralea globemallow

Family (Common Name): Malvaceae (Mallow Family)

Synonyms: None

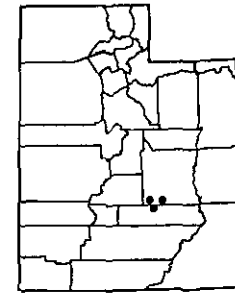
Global Distribution: Southwestern Emery and adjacent Wayne (type from Salt Wash) counties; a Colorado Plateau endemic

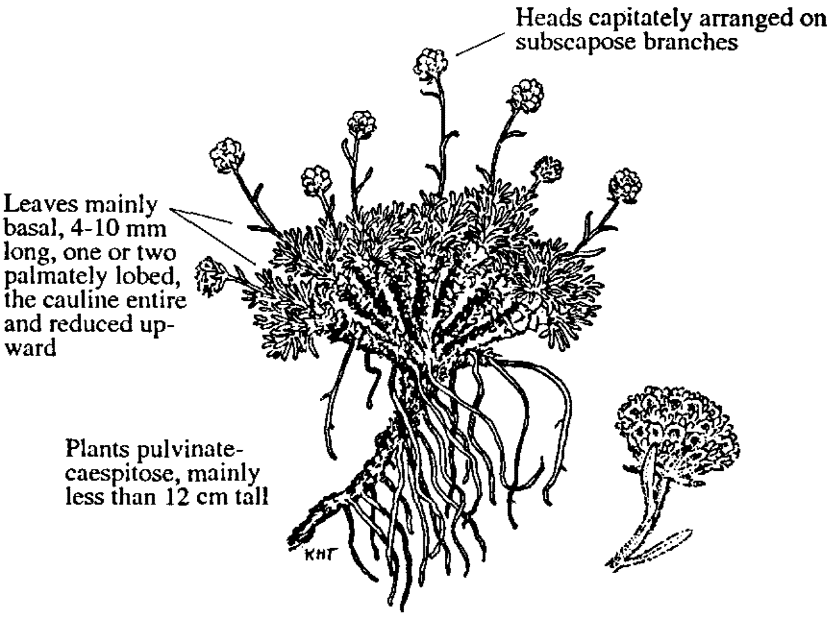
Management Responsibility: BLM-Moab and Richfield Districts

Habitat: Zuckia-ephedra community on saline and gypsiferous Entrada siltstone at 4,000 to 6,000 feet elevation, mid-May-June.

Look-alikes: Similar to *S. coccinea* but lowermost leaves simple and entire or trifoliolate, or some broadly toothed or lobed and rays of hairs steeply ascending, giving the plant a yellowish-green appearance.

Species
Distribution




Heads capitately arranged on subscapose branches
Leaves mainly basal, 4-10 mm long, one or two palmately lobed, the cauline entire and reduced upward
Plants pulvinate-caespitose, mainly less than 12 cm tall
KHT

SPHAEROMERIA CAPITATA

Scientific Name: *Sphaeromeria capitata* Nutt.

Common Name: None

Family (Common Name): Asteraceae or Compositae (Aster or Sunflower Family)

Synonyms: *Tanacetum capitatum* (Nutt.) T. & G.

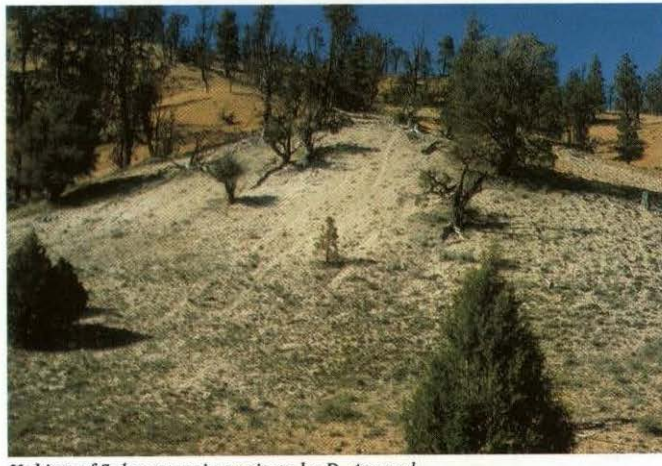
Global Distribution: Montana, and Wyoming, and disjunct in south-central Utah in Garfield County

Management Responsibility: Dixie NF, Bryce Canyon NP, and private

Habitat: Bristlecone pine on Cedar Breaks Limestone at about 5,000-7,800 feet elevation, May.

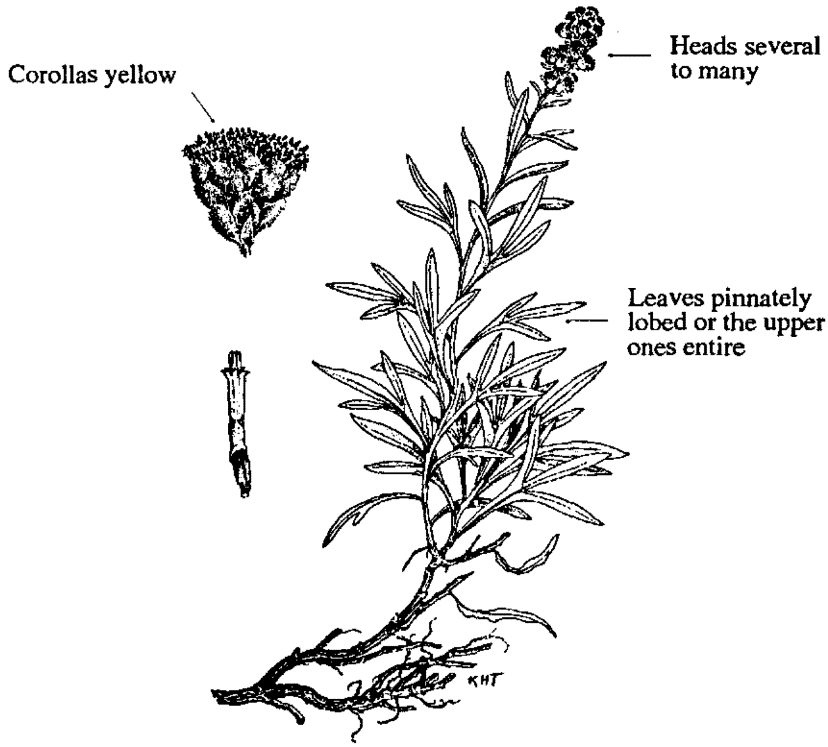
Look-alikes: Similar to other species, but recognized by having the heads capitately arranged on subscapose branches, and in the pulvinate-caespitose habit.

Closeup of Sphaeromeria capitata by D. Atwood



Habitat of Sphaeromeria capitata by D. Atwood

Species
Distribution



SPHAEROMERIA RUTHIAE

Scientific Name: *Sphaeromeria ruthiae* Holmgren, Shultz & Lowrey

Common Name: Zion tansy

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

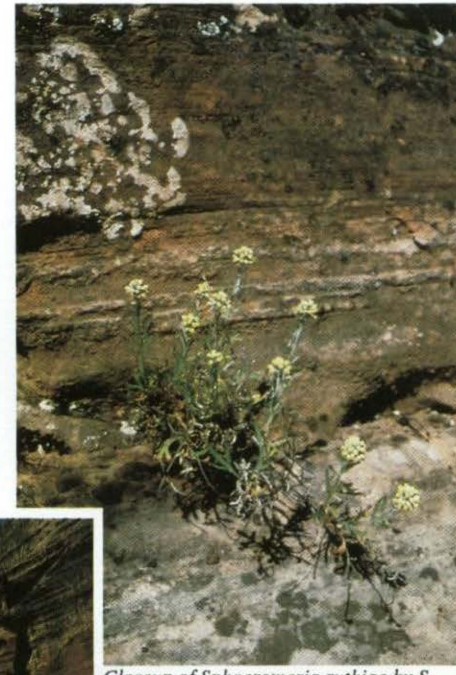
Synonyms: None

Global Distribution: Endemic to Washington County, Utah

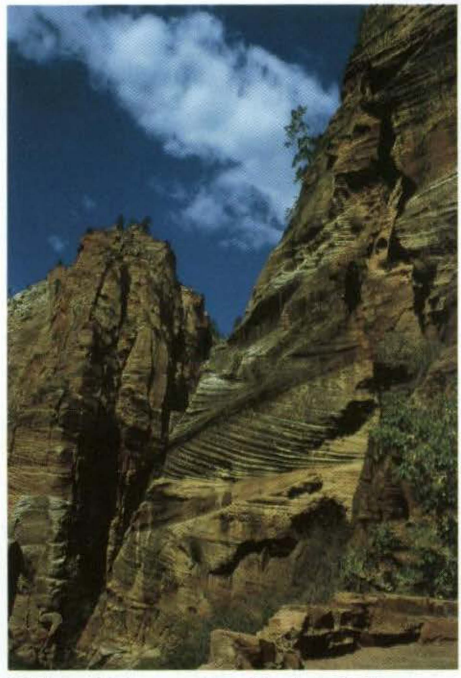
Management Responsibility: Zion NP and BLM-Cedar City District

Habitat: Navajo Sandstone Formation, in crevices of canyon walls in loosely cemented sandstone, ponderosa pine community at 4,800 feet elevation.

Look-alikes: Related to *S. diversifolia*, but differs in the dense tomentum of the plant and the paniculately arranged heads.

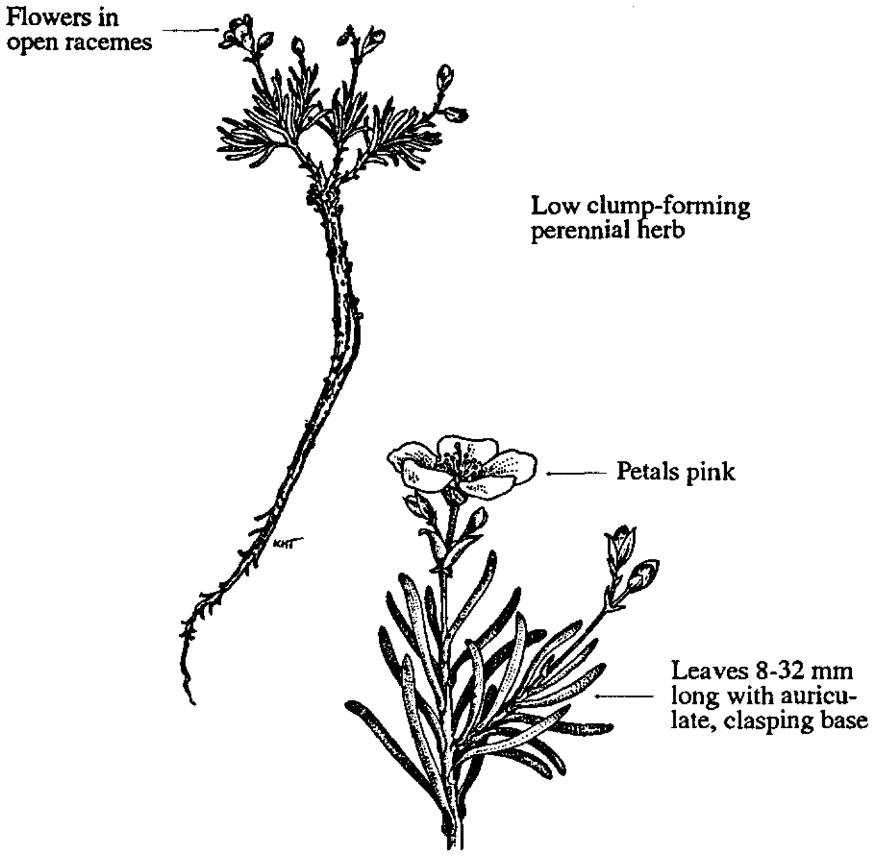


Closeup of Sphaeromeria ruthiae by S. Welsh



Habitat of Sphaeromeria ruthiae by L. Shultz

Species Distribution



TALINUM THOMPSONII

Scientific Name: *Talinum thompsonii* Atwood & Welsh

Common Name: Thompson talinum

Family (Common Name): Portulacaceae (Purslane Family)

Synonyms: None

Global Distribution: Emery County, Utah; a Colorado Plateau endemic

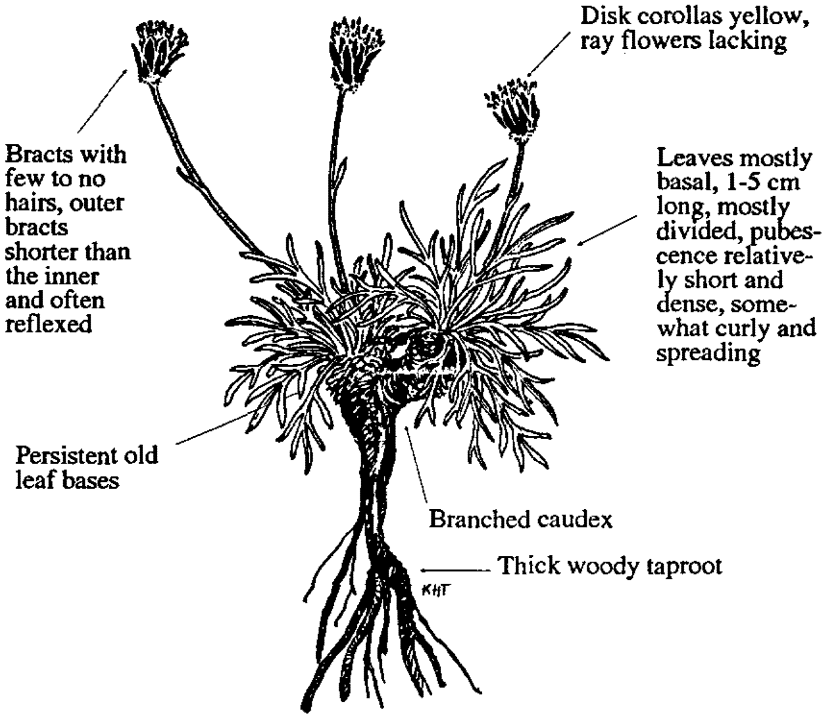
Management Responsibility: BLM-Moab District

Habitat: Silicious conglomeratic gravels in pinyon-juniper and ponderosa pine communities at about 7,500 feet elevation, mid-July-August.

Look-alikes: None

Closeup of Talium thompsonii by D. Atwood

Species
Distribution


Disk corollas yellow, ray flowers lacking
Bracts with few to no hairs, outer bracts shorter than the inner and often reflexed
Leaves mostly basal, 1-5 cm long, mostly divided, pubescence relatively short and dense, somewhat curly and spreading
Persistent old leaf bases
Branched caudex
Thick woody taproot
KHT

THELESPERMA PUBESCENS

Scientific Name: *Thelesperma pubescens* Dorn

Common Name: Uinta greenthread

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to southwestern Sweetwater and extreme southeast Uinta counties, Wyoming and Summit County, Utah

Management Responsibility: Wasatch-Cache NF

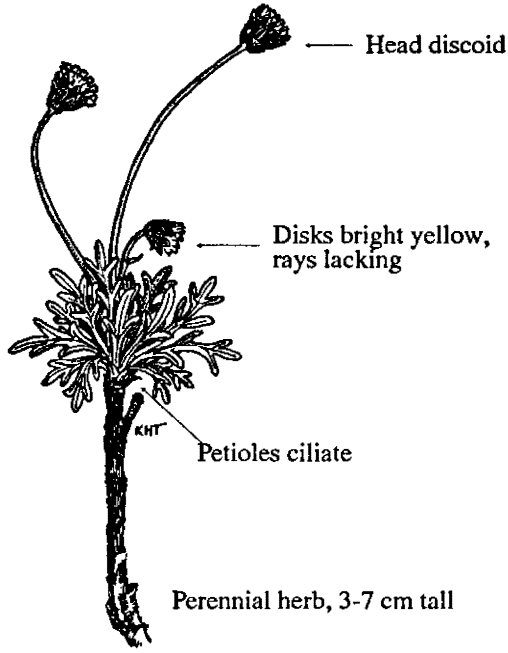
Habitat: Grassland, sagebrush-grassland, or low prostrate forb communities on the Oligicene Bishop Conglomerate on cobbly soils between 8,300 to 8,850 feet elevation, July.

Look-alikes: Possibly confused in flower with *Hymenopappus filifolius* and in vegetative condition with *Erigeron compositus*, but distinct in the relatively short, dense, somewhat curly spreading pubescence, stem leaves few or none, and the short, often reflexed outer bracts with few to no hairs.

Closeup of Thelesperma pubescens by D. Atwood

Habitat of Thelesperma pubescens by D. Atwood

Species Distribution



THELESPERMA SUBNUDUM VAR. *ALPINUM*

Scientific Name: *Thelesperma subnudum* Gray var. *alpinum* Welsh

Common Name: Bicknell Thelesperma

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Endemic to Wayne County, Utah

Management Responsibility: Capitol Reef NP, BLM-Richfield District and Dixie and Fishlake NF's

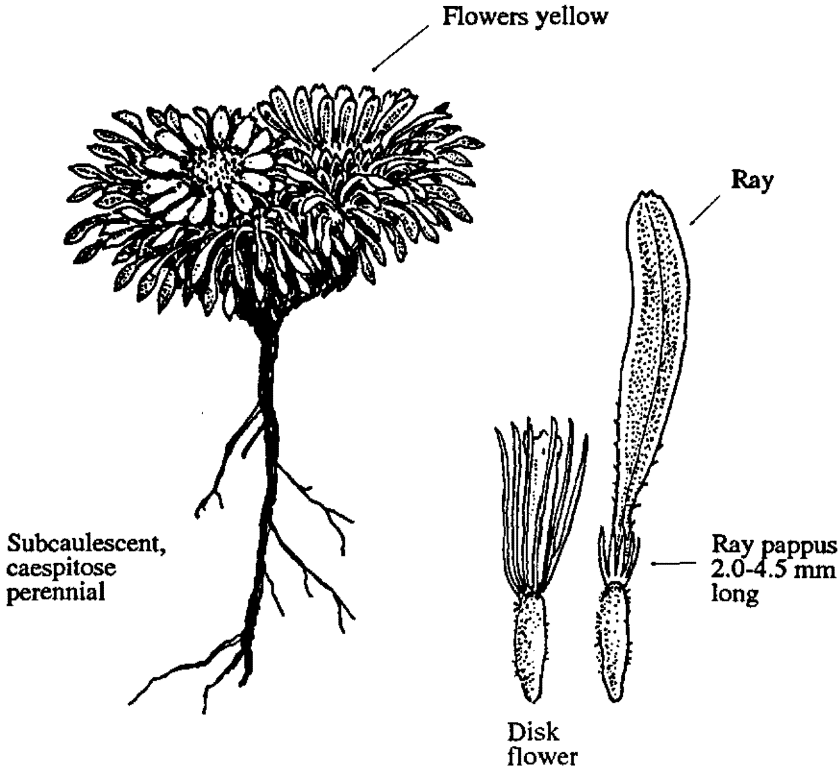
Habitat: Restricted to the Navajo Sandstone and Carmel limestone on the peculiar vari-colored phase in pinyon-juniper, mountainbrush and bristle cone pine communities at 7,380 to 9,000 feet elevation, late June-July.

Look-alikes: Similar to var. *subnudum*, but easily recognized by the lower stature (3-7 cm high), smaller flowering heads (6.3-9 mm high vs 8-14 mm and 9-14 mm wide vs 12-22 mm in var. *subnudum*).

Closeup of Thelesperma subnudum var. alpinum by D. Atwood

Habitat of Thelesperma subnudum var. alpinum by B. Franklin

Species Distribution



TOWNSENDIA JONESII VAR. *LUTEA*

Scientific Name: *Townsendia jonesii* (Beaman) Reveal var. *lutea* Welsh

Common Name: Sevier townsendia

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Sevier and Piute counties, Utah; a Great Basin endimic

Management Responsibility: BLM-Richfield District, Fishlake NF

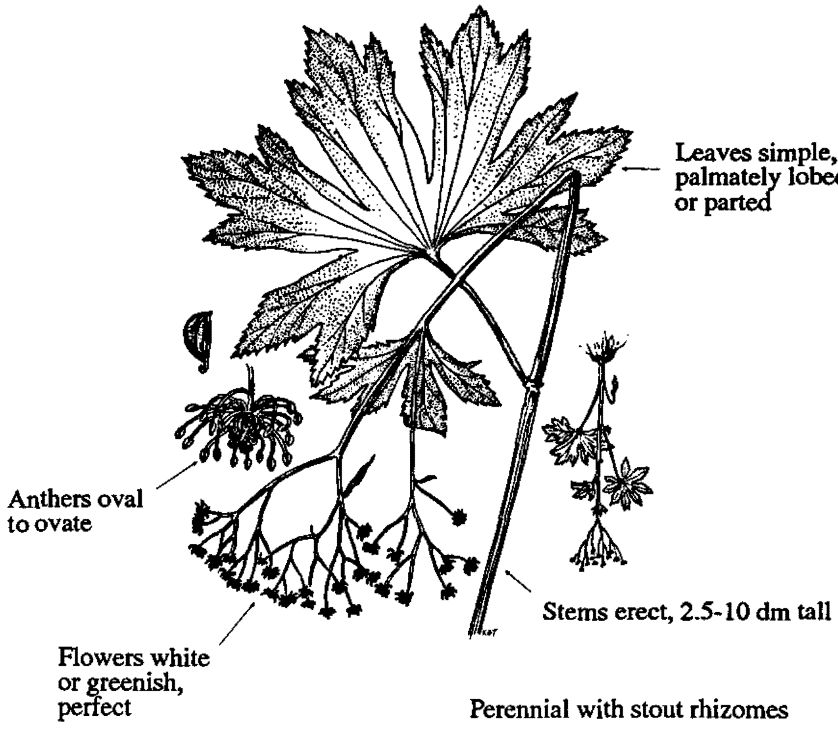
Habitat: Salt desert shrub and juniper communities at 5,500 to 6,000 feet elevation (on Arapien shale and clays in volcanic rubble), May-June.

Look-alikes: Similar to *T. aprica*, but ray pappus 2-4.5 (not 0.7-1) mm long and with subcaulescent (short) stems.

Closeup of Townsendia jonesii var. lutea by D. Atwood

Habitat of Townsendia jonesii var. lutea by C. Tupan

Species Distribution


Leaves simple, palmately lobed or parted
Anthers oval to ovate
Stems erect, 2.5-10 dm tall
Flowers white or greenish, perfect
Perennial with stout rhizomes

TRAUTVETTERIA CAROLINIENSIS

Scientific Name: *Trautvetteria caroliniensis* (Walter) Vail

Common Name: False bugbane

Family (Common Name): Ranunculaceae (Buttercup Family)

Synonyms: *Hydrastis caroliniensis* Walter, *T. grandis* Nutt., *T. media* Greene

Global Distribution: In Utah known only from the Abajo Mountains, San Juan County; British Columbia south to California and New Mexico

Management Responsibility: Manti-LaSal NF

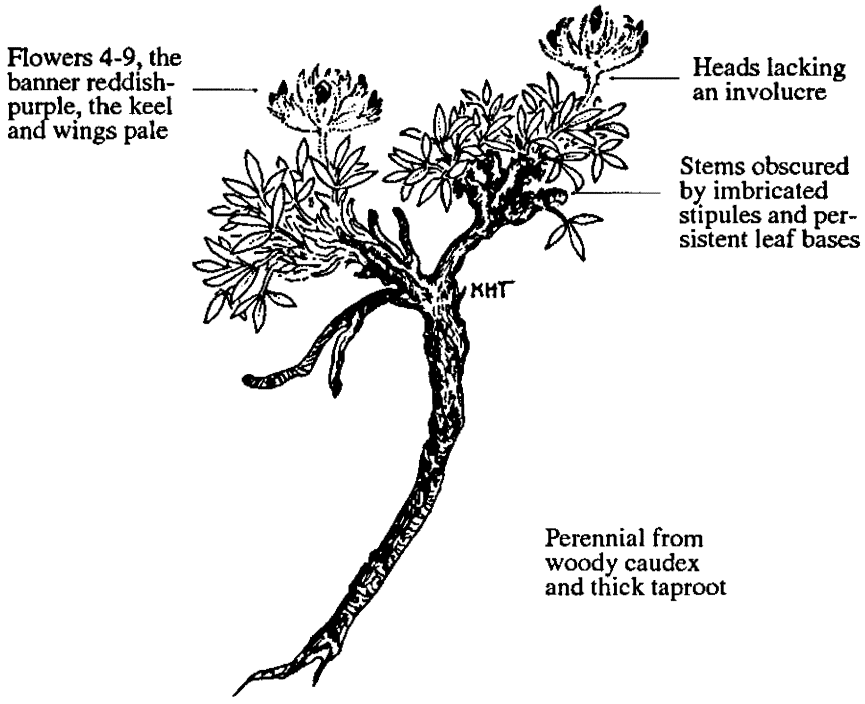
Habitat: Boggy stream sides and dense spruce-fir stands at 9,000-9,850 feet elevation, July-August.

Look-alikes: The only species in Utah, it is easily recognized by the simple palmately lobed or parted leaves, perfect white or greenish flowers, oval to ovate anthers, erect stems and stout rhizomes.

Habitat of Trautvetteria caroliniensis by B. Franklin

Closeup of Trautvetteria caroliniensis by B. Franklin

Species
Distribution


Flowers 4-9, the banner reddish-purple, the keel and wings pale
Heads lacking an involucre
Stems obscured by imbricated stipules and persistent leaf bases
KHT
Perennial from woody caudex and thick taproot

TRIFOLIUM ANDERSONII VAR. *FRISCANUM*

Scientific Name: *Trifolium andersonii* var. *friscanum* Welsh

Common Name: Frisco clover

Family (Common Name): Fabaceae or Leguminosae (Pea Family)

Synonyms: None

Global Distribution: Beaver (San Francisco Mts.) and western Millard (Tunnel Springs Range) counties, Utah

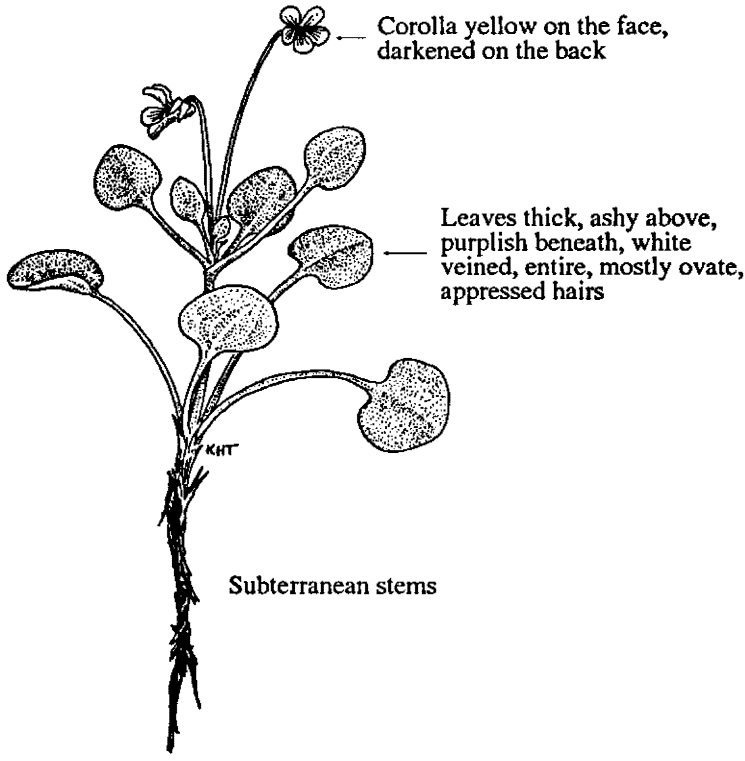
Management Responsibility: BLM-Cedar City and Richfield Districts, private

Habitat: Volcanic gravels and limestone in pinyon-juniper woods at 6,880 to 7,300 feet elevation, June.

Look-alikes: None

Habitat of Trifolium andersonii var. friscanum by S. Welsh

Species
Distribution


Corolla yellow on the face, darkened on the back
Leaves thick, ashy above, purplish beneath, white veined, entire, mostly ovate, appressed hairs
KHT
Subterranean stems

VIOLA PURPUREA VAR. *CHARLESTONENSIS*

Scientific Name: *Viola purpurea* Kellogg var. *charlestonensis* (Baker & Clausen) Welsh & Reveal

Common Name: Charleston Mountain violet

Family (Common Name): Violaceae (Violet Family)

Synonyms: *Viola charlestonensis* Baker & Clausen ex Clokey

Global Distribution: Wahington County, Utah and Charleston Mountains in southern Nevada

Management Responsibility: Zion NP, Dixie NF

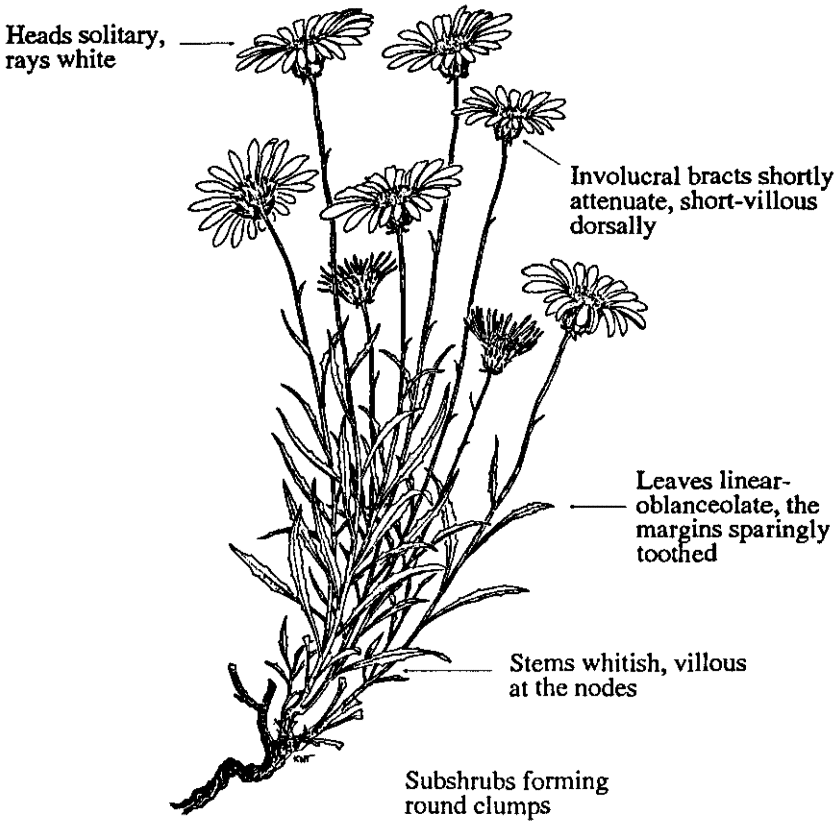
Habitat: Ponderosa pine community on limestone hills, slopes, and dry washes between 6,560-9,510 feet elevation, May-June.

Look-alikes: This species is easily separated from any other yellow violet in the area by its entire leaves, dense white pubescence and pubescent petal spur.

Closeup of Viola purpurea var. charlestonensis by D. Atwood

Habitat of Viola purpurea var. charlestonensis by S. Welsh

Species
Distribution


Heads solitary, rays white
Involucral bracts shortly attenuate, short-villous dorsally
Leaves linear-oblanceolate, the margins sparingly toothed
Stems whitish, villous at the nodes
Subshrubs forming round clumps

XYLORHIZA CRONQUISTII

Scientific Name: *Xylorhiza cronquistii* Welsh & Atwood in Welsh

Common Name: Cronquist woodyaster

Family (Common Name): Asteraceae or Compositae (Sunflower Family)

Synonyms: None

Global Distribution: Kane (Horse Mountain) County, Utah; a Colorado Plateau endemic

Management Responsibility: BLM-Cedar City District

Habitat: Pinyon-juniper community, on the Kaiparowits Formation, at 6,200 to 6,800 feet elevation, June.

Look-alikes: Similar to *X. tortifolia*, but differs in the sparingly toothed leaf margins and linear-oblanceolate leaf shape.

Habitat of Xylorhiza cronquistii by B. Franklin

Species
Distribution

GLOSSARY

Adventitious - Organs unusual in position, as roots developing from stems or leaves.

Acaulescent - Without a stem, the leaves are basal.

Achene - A small dry, hard, 1-loculed, 1-seeded indehiscent fruit.

Acute - Sharp; tapering to the apex with straight sides.

Ament - Catkin; usually deciduous, dense spike or raceme.

Amplexicaul - Clasping the stem, as a leaf base or stipule.

Androgynous - With staminate flowers borne above the pistillate ones, as in many species of *Carex*.

Annual - Plants growing from seed and producing flowers and seeds and drying out the same year.

Anther - The pollen-bearing part of the stamen.

Anthesis - Flowering; when the flower is expanded completely and typically functional.

Apical - Located at the tip.

Appressed - Lying close and flat against another part.

Areola - A small space on or beneath the surface, as between the veins in cacti, which bears the flowers, spines, glochids, or all three.

Armature (armed) - Spines, barbs, prickles, or thorns (or bearing them).

Ascending - Growing obliquely upward, often curving.

Attenuate - Gradually narrowing to a tip or base.

Auricles - An ear-shaped appendage.

Auriculate - One or more auricles.

Awn - A bristle like appendage; the tips of glumes and lemmas on grass.

Banner - Upper petal of a papilionaceous flower, as in the sweet pea.

Basal - Related to, or located at the base.

Bearded - Bearing long hairs, usually in tufts.

Bladdery - Thin and inflated.

BLM - Bureau of Land Management

Bract - A reduced leaf subtending a flower, usually associated with the inflorescence.

Bracteate - With bracts.

Bristles - Stiff hairs.

Caducous - Falling off early or prematurely.

Calyx - Outer whorl of flowering parts; collective term for all sepals of a flower.

Campanulate - Bell shaped.

Capsule - A dry fruit of more than one carpel, which opens to release the seeds.

Catkin - A deciduous dense spike or raceme with bracteate, apetalous, unisexual flowers as in Salicaceae.

Caudex - The woody base of an otherwise herbaceous perennial.

Caulescent - With a definite leafy stem.

Ciliate - Fringed with marginal hairs.

Cinereous - Ash colored; light gray.

Clasping - Leaf partly or wholly surrounding the stem.

Cleft - Split nearly to the middle.

Conic - Cone shaped, with the point of attachment at the broad base.

Connate - The union of like structures.

Copious - Abundant, plentiful.

Corolla - Inner whorl of floral parts; collective name for petals.

Cuneate - Wedge-shaped.

Cuspidate - Tipped with a cusp or a sharp, short, rigid point.

Cylindric - Elongate and circular in cross section.

Cyme - A flat topped or convex paniculate flower cluster, with the central flowers opening first.

Cymose - With flowers in a cyme.

Deciduous - Falling off; not evergreen.

Decumbent - Resting on the ground, but with tip of the stem ascending.

Decurrent - Extending down the stem below the insertion, as with leaves or stipules.

Deflexed - Turned abruptly downward.

Dehiscent - Opening spontaneously when ripe, to discharge the contents (fruit and anthers).

Deltoid - Equilaterally triangular; shaped like the Greek letter Delta.

Dentate - Having the margins cut with sharp teeth, which are not directed forward.

Depauperate - Small or poorly developed, usually due to environmental conditions.

Discoid - Disklike; having disk flowers.

Dorsiventral - Having an upper and lower surface.

Elliptic - A flattened circle form, more than twice as long as broad, widest in the center and two ends equal.

Entire - Undivided, the margin continuous, not incised or toothed.

Erect - Upright in relation to the ground, or sometimes perpendicular to the surface of attachment.

Explanate - Spread out flat.

Exserted - Protruding, as stamens projecting from the corolla; not included.

Federally listed species - Any species processed through the proposed and final rulemaking stages by the U.S. Fish and Wildlife Service (FWS) as threatened or endangered.

Fimbriate - Fringe

Follicles - A dry, dehiscent fruit with locule opening on one suture line.

FS - U.S. Forest Service

FWS - U.S. Fish and Wildlife Service

Galea - The upper lip in certain 2-lipped corollas, as in *Castilleja.*

Glabrous - Without hairs.

Gland - A depression, protuberance, or appendage which secretes a usually sticky fluid.

Glandular - Bearing glands.

Glaucous - Covered or whitened with a bloom, as a cabbage leaf.

Globose - Spherical or rounded.

Glumes - The pair of bracts at the base of a grass spikelet.

Glutinous - Sticky, with a sticky exudation

Gynophore - The stalk of the pistil of rectangular origin, as in the *Astragalus* species.

Hemispheric - Half spherical.

Herbaceous - Pertaining to an herb; opposed to woody; having the texture or odor of a foliage leaf; dying to the ground each year.

Hirsute - Rough, with course, stiff hairs.

Hyaline - Translucent, when seen in transmitted light.

Hypanthium - A cup-shaped enlargement of the receptacle on which the calyx, corolla, and often the stamens are inserted; in perigyny, the "calyx tube."

Inflorescence - The flower cluster of a plant.

Internode - The portion of stem between two connective nodes.

Involucre - A whorl of bracts subtending a flower cluster, as in the heads of Compositae.

Keel - A prominent dorsal ridge, analogous to the keel of a boat; the two lower united petals of a papilionaceous corolla.

Lanate - Woolly; densely clothed with long entangled hairs.

Lanceolate - Lance-shaped; much longer than broad, tapering from below the middle to the apex and to the base.

Lemma - In grasses, the lower of the two bracts immediately enclosing the floret.

Ligneous - Woody, or resembling wood.

Ligules - Thin collarlike appendage inside of the blade found at the junction with the sheath in grasses; the strap-shaped part of a ray corolla in Compositae.

Lobe - A division or segment of an organ, usually rounded or obtuse.

Locule - The cavity or cell of an organ, in reference to the pistils and stamens.

Marcescent - Withering without dropping off, especially basal leaves.

Midrib - The central rib of a leaf or other organ.

Mottled - Marked with colored spots.

Muricate - Rough with short and firm sharp outgrowths.

Nerve - A simple vein or slender rib of a leaf or bract.

Node - The joint of a stem; the point of insertion of a leaf or leaves

Nut - A hard, indehiscent, usually 1-seeded fruit, produced from a compound ovary.

Nutlet - A small nut.

Obconic - Conical, but attached at the narrower end.

Oblanceolate - Inversely lanceolate.

Obovate - Shaped like the longitudinal section of an egg, but with the broadest part toward the tip.

Ochroleucous - Yellowish white.

Orbicular - Approximate circle in outline.

Ovary - The part of a pistil containing the ovules.

Palate - An appendage in the throat of an irregular flower partly or completely closing the throat.

Palea - One of the chafflike scales on the receptacle of many Compositae; the inner bract of a grass floret, often partly surrounded by the lemma.

Palmate - Lobed or veined where the branches arise from a central point; like the fingers on a hand.

Panicle - A compound racemose inflorescence.

Papilionaceous - Butterflylike corolla of the pea; with banner, wings, and keel.

Pappus - Modified calyx limb of Compositae; with a crown of bristles or scales at the summit of the achene.

Pectinate - With narrowly set divisions, as in the teeth of a comb.

Pedicel - The stalk of a single flower in a cluster, or of a spikelet in grasses.

Peduncle - The stalk of a flower or flower cluster.

Pendulous - Hanging downward; pendent.

Perennial - Of three or more years duration.

Perianth - The floral envelopes; collectively, the calyx and corolla, especially when they are alike.

Perigynous - Borne around the ovary, not beneath it; as when the stamens, corolla, and sepals are inserted on the floral tube.

Petal - One of the leaves of a corolla, usually colored.

Petiolate - With a leaf stalk or petiole.

Pilose - Bearing soft and straight spreading hairs.

Pinnate - A compound leaf, having leaflets arranged on each side of a common petiole; featherlike.

Pistil - The ovule-bearing organ of a flower, consisting of a stigma and ovary, usually with a style between; gynoecium.

Pistillate - Provided with pistils and without stamens; female.

Pod - Any dry, dehiscent fruit, especially a legume.

Procumbent - Trailing on the ground, but not rooting.

Proposed Species - Any species of fish, wildlife, or plant that is proposed by the FWS or the National Marine Fisheries Service to be listed as threatened or endangered.

Prostrate - Lying flat upon the ground.

Pseudoscape - A false scape, as in a tulip where not all the leaves are basal.

Pubescent - Covered with short, soft hairs; downy.

Pulvinate - Cushion-shaped.

Punctate - Dotted with punctures, translucent pitted glands, or colored dots.

Raceme - A simple, elongated, indeterminate inflorescence with each flower sub-equally pedicelled.

Rachis - The axis of a spike or raceme or of a compound leaf.

Ray - A primary branch of an umbel; in Compositae, the ligule of a ray flower bearing the flowers in the head.

Reniform - Kidney shaped.

Retrorse - Bent backward or downward.

Revolute - Rolled backward from both margins toward the underside.

Rhizome - An underground stem or rootstock, with scales at the nodes and producing leafy shoots on the upper side and roots on the lower side.

Rosette - A crowded cluster of radiating leaves appearing to rise from the ground.

Rosulate - With a collection of clustered leaves; a rosette.

Rugose - Wrinkled.

Sagittate - Arrowhead shaped, with the basal lobes turned downward.

Scaberulose - Intermediate between scabrous and minutely pilose.

Scabrous - Rough to the touch, owing to the structure of the epidermis or to the presence of short stiff hairs.

Scape - A leafless peduncle rising from the ground in acaulescent plants.

Scarious - Thin, dry, and membraneous; not green.

Secund - Arranged on one side only; unilateral.

Sensitive Species - A plant species, subspecies, or variety for which the Regional Forester, and BLM State Director has determined there is a concern for the species viability within a state, as evidenced by a significant current or predicted downward trend in populations or habitat. This includes federal candidates (C1, C2 and some C3) and federally proposed species.

Sepal - A leaf or segment of the calyx.

Serrate - Saw-toothed, the sharp teeth pointed forward.

Sessile - Attached directly by the base, not stalked, as a leaf without a petiole.

Setose - Beset with bristles.

Sheath - The tubular basal part of the leaf enclosing the stem, as in grasses and sedges.

Silicle - A short silique, typically less than twice as long as wide.

Silique - A many seeded capsule of Cruciferae, with two valves splitting fromthe bottom and leaving the placentae with the false petition (replum) between them.

Soboliferous - Bearing sobols; elongate caudex branches.

Sorus (pl. sori) - The fertile portion of a fern frond; the place where sporangia are borne.

Spathaceous - Like a spathe; bracts enclosing a flower cluster.

Spatulate - Like a spatula, a blade rounded above, gradually tapering to the base.

Spicate - Having the form of or arranged in a spike.

Spinulose - Having spinules.

Spreading - Diverging almost to the horizontal; nearly prostrate.

Spur - A slender, saclike, nectariferous process from a petal or sepal.

Stamen - The male organ of the flower which bears pollen.

Staminate - Having stamens but no pistils; male, not seed bearing.

Staminode - A sterile stamen, or what corresponds to a stamen.

Stigma - The receptive part of the pistil on which the pollen germinates.

Stipe - The stalk beneath an ovary inserted on the receptacle.

Stipitate - Without a stipe or a stalk.

Stolon - A modified stem bending over and rooting at the tip or creeping and rooting at the nodes; a horizontal stem giving rise to a new plant at its tip.

Stoloniferous - Having stolons.

Stramineous - Strawlike as color or texture.

Strigose - Clothed with sharp and stiff appressed straight hairs.

Strigulose - Intermediate between strigose and pilose.

Stylopodium - An enlargement or disklike expansion at the base of the style as in the Apiaceae.

Sub - A prefix signifying somewhat, slightly, rather, or almost.

Suffrutescent - Obscurely shrubby; vs. slightly woody, but not necessarily low.

Taproot - The primary root from which the secondary roots arise.

Terete - Cylindric; round in cross section.

Ternate - Occurs in threes, as a leaf consisting of three leaflets.

TNC - The Nature Conservancy

Tomentose - With tomentum; covered with a short, densely matted, soft white wool.

Torulose - Constricted between the seeds.

Trigonous - Three-angled.

Truncate - As if cut squarely on the end.

Tuberous - Producing or resembling a tuber or underground stem.

Turbinate - Top-shaped.

Umbel - A flat or convex flower cluster in which the pedicels arise from a common point, like the rays of an umbrella.

Valve - One of the segments into which a dehiscent capsule or legume separates.

Villous - Bearing long, soft, and unmatted hairs; shaggy.

Viscid - Sticky, glutinous.

Whorl - A ring of similar organs radiating from a node.

Wing - A thin, usually dry extension bordering an organ; a lateral petal of a papilionaceous flower.